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Monterey, California

AN AMBIENT AIR QUALITY MODEL FOR
ASSESSMENT OF U.S. NAVAL AVIATION EMITTANTS

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NAVAL POSTGRADUATE SCHOOL

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An air quality assessment model for U.S. Naval aircraft operations was developed from a generalized air quality assessment model for U.S. Air Force operations. Data were gathered by observation of operations at a Naval Air Station and these data used to conduct parametric studies to demonstrate the capabilities of the model. Modifications to the original model and these parametric studies are discussed.

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I. INTRODUCTION

Public awareness of the environment and its quality, and governmental concern for the public health and welfare, have resulted in substantial environmental legislation in the last fifteen years. Federal air quality legislation culminated in 1970 with the creation of the Environmental Protection Agency (EPA). This agency was charged with developing and implementing national air quality standards. In 1971 air quality standards were prescribed for carbon monoxide, hydrocarbons, nitrogen dioxide, particulate matter, sulfur dioxide and photochemical oxidants [Ref. 1].

Both the Air Quality Act of 1967 and the Clean Air Act of 1970 refer to aircraft emissions as a possible source contributing to air pollution. In 1973 emission standards and test procedures were prescribed for commercial aircraft engines by the EPA [Ref. 2]. The EPA was concerned with pollution of the lower atmosphere by combustion products produced by commercial aircraft. The lower atmosphere was defined to extend from ground level to three thousand feet. Aircraft operations were defined in terms of a landing and take off operational cycle time-in-mode (LTO). Techniques were prescribed for measuring emissions during a simulated LTO, and engine specifications were defined by engine thrust category based on engine type and date of manufacture.

The goal of the EPA is the prevention of degradation of ambient air quality. An accurate quantification of emissions and their distribution throughout a local environment is required to assess the impact of any emission source on air quality. Once quantification is accomplished, the predicted ambient air quality can be compared to EPA requirements, and control procedures, if warranted, can be instituted by the operating agency/corporation. Mathematical models which simulate aircraft, air base and off air base activities provide the most flexible approach to quantifying emissions by source and to distributing these emissions over a grid of receptors for determination of ambient air quality.

There have been several major modeling efforts which are concerned with air quality as affected by aircraft operations. An early model was developed by Northern Research and Engineering Corporation (NREC) [Ref. 3]. This model provided the basis for development of the GEOMET Model [Ref. 4]. The GEOMET Model significantly modified and improved the NREC model and has been validated to some extent by measurements at the Washington National Airport. Military air operations may differ significantly from civilian air operations. To this end Argonne National Laboratory has been contracted by the USAF to develop a computer model based on the TRW "Air Quality Display Model" (AQDM) [Ref. 5] to estimate the concentrations of pollutants throughout a theoretical grid of receptors over a period of time. Under this contract Argonne has developed a preliminary version of "A Generalized Air Quality

Assessment Model for Air Force Operations"(AQAM), which brings together several models of different pollution sources and will serve as a device for assessing environmental air quality [Ref. 6].

The above models include emission and dispersion programs. There are some differences between the GEOMET and AQAM models. These differences are primarily in the areas of source representation and dispersion parameter specification.

Argonne's original contract included 12 specific tasks [Ref. 6]. Among them was a generalization and update modification of AQDM to obtain long-term average calculations which included military aircraft landings and take-offs as a source of emissions. In addition they were to develop a short-term model which performed hourly calculations and an inventory model which summarized annual emissions at an activity by source.

Standards proposed by the EPA for civil aviation do not apply to the military. However both the United States Air Force (USAF) and the United States Navy (USN) have, in a spirit of cooperation, proceeded to establish a data base for engine emissions [Ref. 7 and 8] and to specify LTO cycles consistent with their respective aircraft operations [Ref. 9 and 10].

The USAF data base and LTO cycles were incorporated into the air quality assessment model developed by Argonne. This model may be used to assess the impact on air quality of aircraft operations, to evaluate the effect of modifications

of aircraft operations on air quality, to determine the qualitative importance of aircraft, air base and environ (off air base) emission sources, to provide an estimate of local ambient air quality and to optimize the location of receptors for model verification.

"Liason between the Air Force Weapons Laboratory at Kirkland AFB, New Mexico, the Naval Air Propulsion Test Center (NAPTC) at Trenton, New Jersey, and the Naval Post-graduate School, Monterey, California" stimulated USN interest in the capabilities of the Argonne model. Accordingly a copy of both the Source Inventory and Short-term pollution models were obtained for evaluation and adaptation to USN operations [Ref. 10].

Substantial modifications were made by LCDR Keith I. Weal to adapt the Argonne model to USN aircraft operations [Ref. 10]. An LTO cycle is defined by the number of operational modes required to complete the cycle. The EPA utilizes ten, and the USAF eleven, operational modes to define an LTO cycle. These cycles are restricted to a vertical plane and do not define operational modes which are peculiar to the USN. Reference 10 defines a USN LTO cycle to consist of sixteen operational modes including such USN vagaries as "hot refueling" and Field Carrier Landing Practice (FCLP). Naval aircraft operations are dictated, even when based ashore, by the demanding (often unforgiving) shipboard environment. This shipboard environment requires substantial low altitude, high intensity operations to ensure

combat readiness. Therefore, LCDR Weal expanded the simulations of aircraft flight from two to three dimensions.

The present study completed adaptation of the Argonne model to Navy operations and used this version of the model to assess the relationship between aircraft operations, air base activity and off air base activity on ambient air quality at the Miramar Naval Air Station (NAS).

II. MODEL OVERVIEW

AQAM is composed of a Source Inventory Program, a Meteorological Data Program, a Short-term Emission Dispersion Program and a Long-term Emission Dispersion Program [Ref. 6]. The Source Inventory Program produces an annual source emission inventory and creates a data bank of temporal distribution arrays, source geometries, and source operational activity factors which are utilized by both the Long- and Short-term Programs. "The Short-term Program computes hourly average air pollutant concentrations using hourly average meteorological and emission data" [Ref. 6]. The Long-term Program computes monthly or annual average air pollutant concentrations utilizing emission data and historical meteorological records. The Meteorological Data Program is used only as input to the Long-term Program. Only the Source Inventory Program and the Short-term Emission Dispersion Program are being modified to provide an air quality assessment model for Naval air operations.

> The Source Inventory Program computes the annual emissions of three categories of sources: aircraft, airbase but non aircraft, and environment (off air base). Each category is further divided by its geometric configuration into point sources, area sources and line sources [Ref. 10].

After the spatial configuration of the source is defined the emission plume is located in three-dimensional space and the mass emission rate of each pollutant emitted by the source is

determined from source activity data and appropriate emission factors [Ref. 6].

Aircraft sources which define the Navy LTO cycle are listed in Table I. Aircraft flight and taxi operations are simulated by finite line sources. Aircraft servicing, delays and pre-flight checks are simulated by area sources.

Aircraft sources include all emissions due directly to aircraft operations and servicing. The operational characteristics and servicing requirements of aircraft are dependent on aircraft type. Therefore, the emissions from aircraft operations and servicing are calculated from unique operational data which define various modes of operation and differentiate between aircraft types, taxi paths, parking areas, refueling procedures and runways.

Commercial and military air operations are always supported by an air base. Air base sources are defined as those sources producing emissions due directly to non-aircraft base activities and include all base support facilities, training facilities, service facilities, housing, vehicle parking areas and on-base roadways. Listed in Table II [Ref. 11] by geometric configuration are the non-aircraft sources encountered at most military air bases.

The environment which surrounds an air base must be accounted for in assessing air quality. "Environ" sources include all point, line and area sources which exist beyond the boundaries of the air base. Motor vehicle emissions are calculated from activity factors and may be specified as

TABLE I

NAVY LTO MODES

MODE OF OPERATION	SOURCE MODEL
Startup	Area
Taxi out	Line
Take off delay*	Area
Engine check	Area
Runway (take off) roll	Line
Climb (1+2)	Line
Approach IFR	Line
Approach VFR*	Line
Landing	Line
Taxi in	Line
(Hot + Pit) refuel delay*	Area
Hot refuel*	Area
Shutdown	Area
(Arrival + Departure) servicing	Area
Fuel venting	Area
Fill + spill	Area
TGO pattern*	Line
FCLP pattern*	Line
Pad work*	Line
Hover work*	Area
Autorotation pattern*	Line

*Modification to AQAM

TABLE II

AIR BASE NON-AIRCRAFT EMISSION SOURCES
(from Ref. 11)

POINT	LINE	AREA
Training Fires	Military Vehicle	Fuel, Working
Test Cells	Civilian Vehicle	Fuel, Spillage
Runup Stands	Other	Fuel Breathing
Power Plants		- Storage Tanks
Incinerators		- Tank Trucks
Large Storage Tanks		- Auto Parking
Other		Other Hydrocarbons
		Space Heating
		Off-Road Vehicles
		Military Vehicle
		Civilian Vehicle

area or line sources. All other environ sources (point, area and line) require data input of actual annual emissions by pollutant type in addition to spatial configuration data. Land use factors may be used for an order of magnitude estimate of environ area source emissions [Ref. 6].

Since aircraft, air base and environ emissions are inventoried by the Source Inventory Program, this program acts as a comprehensive model for calculation of annual emissions and provides a qualitative ranking of the importance of each source to air quality. The Source Inventory Program also produces the data bank containing source characteristics, annual emission rates and temporal distribution activity which is utilized by the Short-term Program.

The Short-term Program "receives the compiled annual results of the Source Inventory Program and calculates the dispersion of generated pollutants during a given hour, day and month utilizing average meteorological conditions for that hour" [Ref. 10].

Most emissions which have zero plume rise are classified as area or line sources. Those sources which exhibit plume rise are classified as point sources. Point source emissions require an input data set of physical and geometric parameters to define a plume in three-dimensional space with the exception of large storage tanks and run-up stands which are modeled as point sources without a plume rise. In general, point sources with vertical exhaust emissions are modeled by a Holland or Carson-Moses plume rise and those with horizontal

exhaust or evaporative transport are modeled without a plume rise.

Plume definition requires the input of many parameters. For example, point source data specified for test cells consist of the X,Y coordinates of the source, stack height, stack exit gas temperature, stack exit gas velocity, stack diameter, building height, and initial and vertical dispersion parameters. Line and area sources require less source physical definition since these sources are modeled without a plume rise. Line sources are specified by the length of the line and the activity which occurs on the line. Area sources are specified by the X,Y coordinates of the center of the area, the length of a side and the activity which occurs in the area. "Transport and dispersion of pollutant emissions are modeled using a steady state Gaussian plume formulation" in both the horizontal and vertical directions. Point sources are treated by a "virtual source technique," whereas line sources are treated by "analytical integration over the length of the line" and area sources are treated as "pseudo point sources located upwind of the actual area source" [Ref. 6]. The appropriate travel time or travel distance dispersion coefficients are used "to estimate lateral and vertical diffusion" and downwash rules are utilized to determine the effective emission height [Ref. 6]. The dispersal of pollutants over a grid of receptors allows comparison of ambient pollutant concentrations to air quality standards.

III. ADAPTATION REQUIREMENTS

Military aviation differs considerably from commercial aviation in landing and departure evolutions. In addition, USN flight evolutions differ from USAF flight evolutions due to "the dissimilar operational landing facilities used by the two services" and the different training requirements imposed by the dissimilar missions of the two services. "A USAF aircraft always utilizes a runway or other prepared surface for takeoffs and landings, as opposed to Naval aviation's use of the comparatively small aircraft carrier" [Ref. 10].

Both the EPA's and USAF's LTO cycles confine all flight operations in one vertical plane [Ref. 2, 8, and 9]. Reference 10 stipulates that flight operations occur in a vertical plane only when Instrument Flight Rules (IFR) are in effect and that flight operations are best simulated by three-dimensional models when Visual Flight Rules (VFR) are in effect. Figures 1 and 2 depict IFR and VFR aircraft operations.

The three-dimensional LTO cycle required to adequately simulate VFR approaches, touch and go (TGO) training cycles and Field Carrier Landing Practice (FCLP) is developed in Ref. 10. The development of the three-dimensional LTO cycle provides more realistic estimates of the total emissions due to aircraft operations. In addition, for Navy operations,

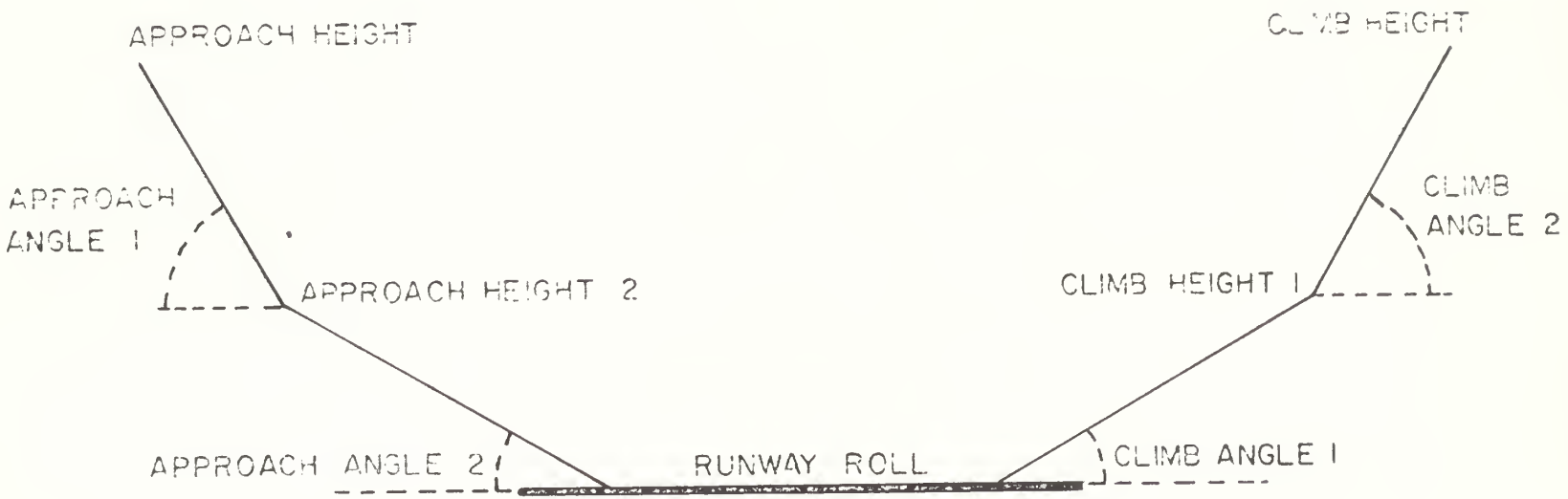
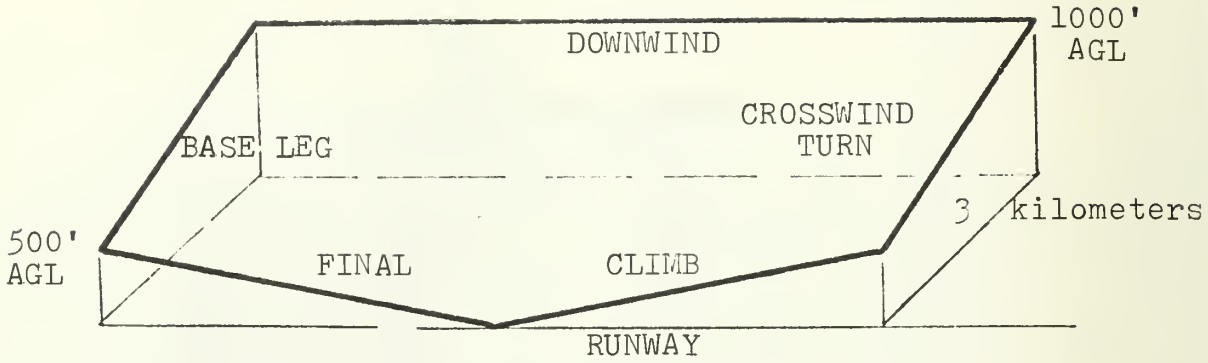
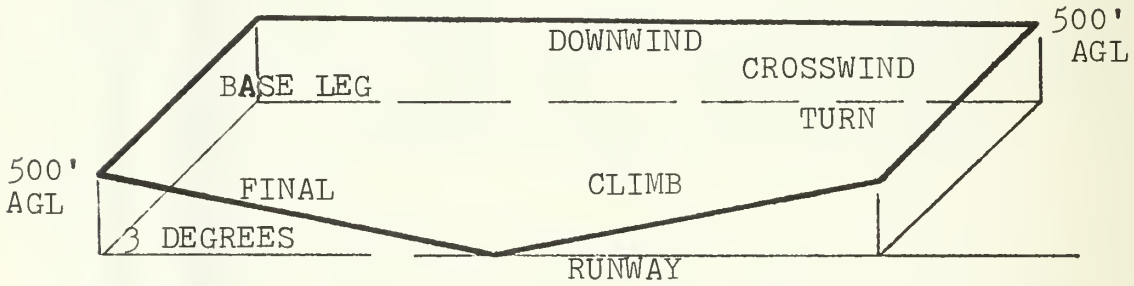


Figure 1. IFR APPROACH AND DEPARTURE



SIMULATION OF USN TGO PATTERN



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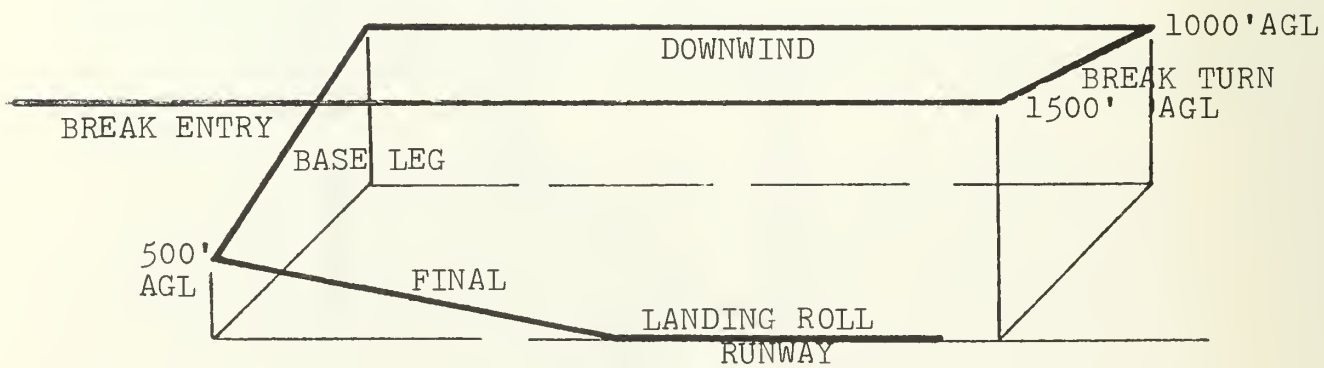


SIMULATION OF USN VFR BREAK ENTRY

FIGURE 2. VFR FLIGHT SIMULATIONS

it was required to expand AQAM to include autorotations and the off runway environment so that rotary wing aircraft operations could be simulated.

Many Naval Air Stations possess a large complement of rotary wing aircraft. These aircraft operate almost exclusively below 3000 feet while in the vicinity of the airfield. Rotary wing aircraft utilize the VFR, TGO and FCLP patterns described in Ref. 10, but at lower altitudes and speeds. Helicopters also operate in specified areas away from the runway environment. These areas are normally called "pads," and the training which occurs is referred to as "pad work" and "hover work." Since training "pads" are often utilized for fifty per cent of any helicopter operational cycle, the inclusion of "pad work" and "hover work" in both the Source Inventory Program and Short-term Program was necessary.

AQAM limited aircraft refueling from fuel trucks to the aircraft parking areas. Reference 10 extended AQAM to include "the pressure refueling of aircraft with their engines running," termed "hot refueling." This original modification was not consistent with the model format nor did it account for delays in entering the hot refuel area. Also, another type of refueling exists, termed "pit refueling." The latter procedure involves pressure refueling an aircraft after it has shutdown in a specified area (the pit) other than its normal parking area. The aircraft is then towed to its parking area after refueling. Therefore, servicing and

shutdown emissions must be accounted for in the pit area and account must be made for aircraft delays in entering the pit area.

Another aspect of aircraft operations, military or commercial, which should be included in any LTO cycle is the take-off delay which occurs at the end of the runway. This delay can be quite extensive as it involves pre-flight checks, IFR clearance changes, safe separation of aircraft, and formation flight join-up. This delay was not modeled in AQAM as it was not part of the EPA and USAF LTO cycles.

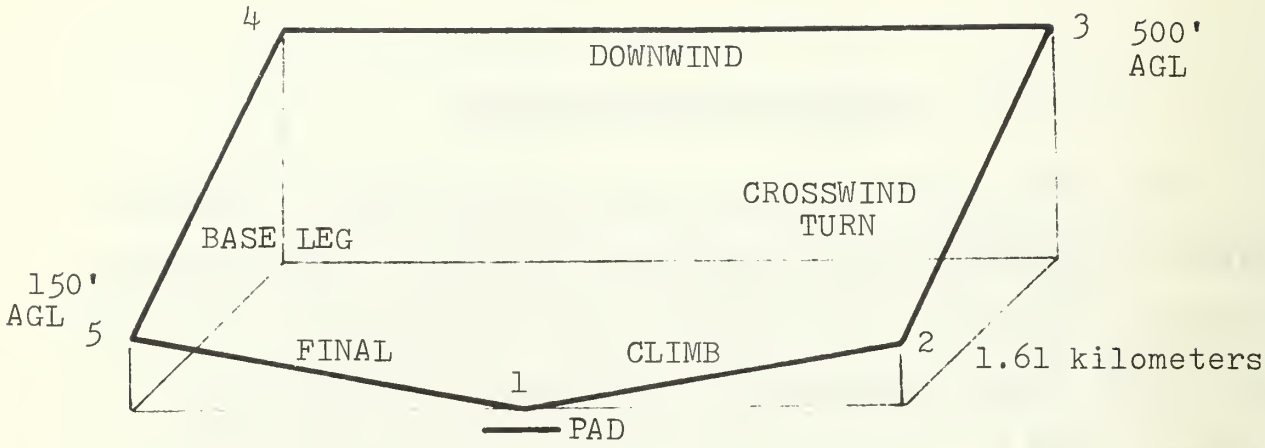
The requirements to change the aircraft related portions of AQAM were generated by the differences between commercial, USAF and USN aircraft operations. Due to special training requirements to ensure safe operations aboard ship, the USN developed a much larger LTO cycle which required three-dimensional models to simulate air operations. The models for non-aircraft activity were not changed since air base parameters are relatively consistent from base to base, and the environ parameters were flexible since the environment cannot be predicted a priori from base to base.

IV. ADAPTATIONS ACCOMPLISHED

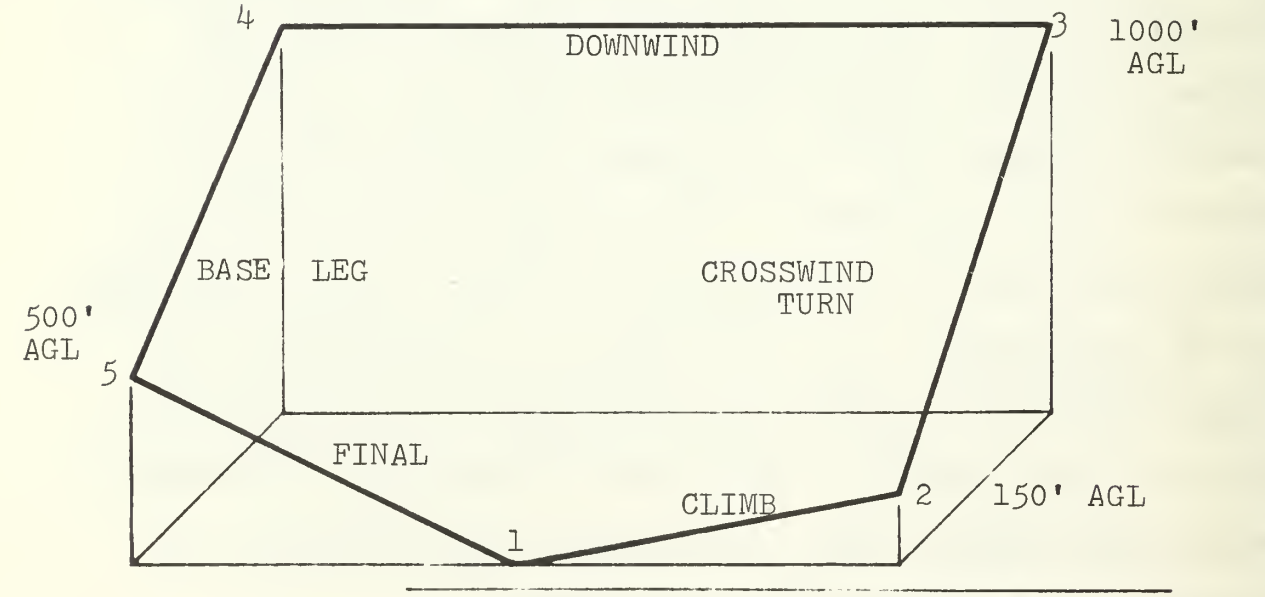
The initial modifications made to adapt AQAM to represent Naval air operations are described in Ref. 10. These modifications nulled level line sources that existed above the mixing depth, keyed calculations to aircraft operations on a runway, added hot refueling as an area source and expanded the LTO cycle from two to three dimensions by developing crosswind and downwind aircraft flight paths to simulate VFR approaches, TGO cycles and FCLP cycles.

Rotary wing aircraft operate in both a runway and off runway environment. The IFR, VFR, TGO and FCLP simulations described in Ref. 10 and depicted in Figures 1 and 2 adequately represent normal helicopter operations to a runway. However, pattern heights and lengths of crosswind legs are different for helicopters. One maneuver practiced by rotary wing pilots which is not represented by the latter simulations is the autorotation. An autorotation is the emergency procedure utilized to safely land a helicopter which has experienced a dual engine or tail rotor failure while in flight. Regulations require that this maneuver, when practiced, be conducted to a prepared surface (runway).

An autorotation pattern is depicted in Figure 3. The helicopter climbs to 150 feet (Point 2) from a hover (Point 1) over the runway. At Point 2 the aircraft commences a climbing crosswind turn to downwind entry (Point 3). If



SIMULATION OF USN HELICOPTER PAD WORK PATTERN



SIMULATION OF USN HELICOPTER AUTOROTATION PATTERN

FIGURE 3. HELICOPTER FLIGHT SIMULATIONS

the crosswind turn is completed prior to 1000 feet the climb is continued to 1000 feet. The downwind leg is flown at 1000 feet, paralleling the runway until abeam the point of intended landing. As soon as safe separation between aircraft can be established a descending turn is commenced toward the runway (Point 4 to Point 5). The autorotation is entered anytime between point 4 and point 5 by going from a normal power setting to an idle power setting. The final leg is entered at 500 feet with the nose of the aircraft lined up with the centerline of the runway. On final, a flare is executed to arrive at zero to low airspeed over the intended point of landing. This hover altitude is modeled as 20 feet, but actually varies with helicopter type. The entire pattern is flown at 70 knots. If the autorotation is performed at a speed other than 70 knots, this speed is attained while in the downwind leg.

In order to conduct extensive hover work for training purposes and to relieve the runway of congestion, helicopters often operate on pads which are adjacent to the runway. Flight patterns to and from these pads always parallel the flight pattern for the runway being utilized.

A pad work pattern is depicted in Figure 3. The helicopter climbs to 150 feet (Point 2) from a hover over the pad (Point 1). At Point 2 a climbing crosswind turn is commenced to enter (Point 3) the downwind leg parallel to the pad at 500 feet. The downwind leg is continued until abeam the pad. As soon as safe separation between aircraft can be established a descending turn from Point 4 to Point 5

is executed. The final phase of the approach commences at 150 feet (Point 5), with the nose of the helicopter lined up with the center line of the pad. The helicopter adjusts power, and flares as necessary to arrive over the pad at zero or low speed in a 10 feet hover. The hover altitude can vary with training requirements but is most often in the 5 to 20 feet range.

Hover work was modeled as an area source utilizing the X,Y coordinates of the pad and the length of the side of the operating area. Hover work involves a great deal of aircraft movement about all three axes; therefore, it is best modeled as an area rather than a point source. Helicopters must be timed by type while conducting hover work to establish an average time-in-mode hover. This time may then be used to determined total emissions and emission rates.

Modification of AQAM to accept "hot refueling" and "pit refueling" options plus their associated delays was desired since these evolutions can be varied for pollution control at air stations. The Source Inventory Program was modified to accept a hot refuel delay area source, a hot refuel area source, a pit delay area source and a pit refuel area source. Observation indicated that certain refuel areas were used exclusively by specific aircraft. Therefore, each aircraft type was tagged to indicate its normal refuel procedure.

Each refuel and delay operation was timed, and times in each area were assigned by aircraft type.

Another evolution which can be varied for pollution control is the take off delay at the end of the runway. This delay was incorporated into the LTO cycle for USN aircraft operations and was modeled in the same area as the engine check area source. Dwell times in this mode of operation were measured and assigned by aircraft type.

AQAM, when first received, used only JP4 fuel parameters to model jet fuel. Since the Navy utilizes JP5 fuel, the JP5 fuel parameters were added to the model in place of the JP4 parameters. Fuel parameters affect vapor pressure and are significant in determining hydrocarbon evaporative losses.

The Short-term Program was modified to accept level line sources at or above an inversion layer as null sources [Ref. 10]. This modification was extended to any line sources which existed entirely above an inversion layer, be they level or skewed lines.

The Short-term Program limited the number of grid receptors to 312. This number was insufficient to delineate the environ sources about the air station. Therefore, the number of grid receptors was increased to 412.

Since AQAM was developed for the USAF, it did not have a runway roll (take-off) equation for the F-14 aircraft. The following series of equations were developed for the

F-14 using the least squares procedures specified in Ref. 12.

(Dimensionless) $TOF = (0.0001 \times T^2) + (0.0002 \times PA + 0.0040) \times T + (0.0001 \times PA^2 + 0.0181 \times PA + 0.3100)$

(ft) $GR = (0.0121 \times GW - 206.6421) \times TOF + (0.0350 \times GW - 1106.3345)$

(ft) $FGR = GR - (0.0087 \times GR + 6.4583) \times WS$

T is in degrees Fahrenheit.

PA is in hundreds of feet.

GW is in pounds.

WS is in knots.

The take off factor (TOF) is calculated from the temperature (T) and pressure altitude (PA) which are specified in the meteorological data. Ground run (GR) is then calculated from the TOF and aircraft gross weight (GW), an LTO cycle input parameter. The final ground run (FGR) is calculated from the GR and the projection of the wind speed (WS) vector on the runway.

V. DATA ACQUISITION

NAS Miramar, California, was selected as the site for data collection for the high intensity air operations conducted, representative on-base facilities and off-base residential/industrial environment. NAS Miramar is one of the most active air stations in the United States. Total aircraft operations (arrivals + departures + TGOs + FCLPs) exceeded 200,000 for 1975. In addition the air station has a large fuel farm, many service and training facilities, much on-base vehicular traffic, engine test cells and base housing. Also, many environ emission sources exist in close proximity to NAS Miramar. Three major highways border the air station to the east, north and southwest. Industrial sites are north and south and residential areas lie to the north, southeast and southwest of the air station. This interplay of aircraft, air base facilities and off air base environment is indicative of many commercial and military airfields today and is the reason the contribution of each source to air quality must be determined. Tables I and III through VI depict the sources analyzed at NAS Miramar.

The initial collection of data at NAS Miramar provided a data base for aircraft operating parameters and meteorological parameters [Ref. 10]. This data base was the

TABLE III

POINT SOURCES AT NAS MIRAMAR

SOURCE	BLDG. NO.
TRAINING FIRES	K118
TEST CELLS	545
	463
	462
	542
	565
RUN UP STANDS	589
	419
POWER PLANT	K212
STORAGE TANKS	935
	940
	936
	319
	483
	K230

TABLE IV

AREA SOURCES AT NAS MIRAMAR

SOURCE	LOCATION
FUEL WORKING	K231 K234 K229 M319 K214 498
FUEL STORAGE	FUEL TANK FARM TEST CELL FUEL TANKS QUALITY CONTROL TANK
TANK TRUCK PARKING	NEAR 592 NEAR K229
VEHICLE PARKING	TEN AREA SOURCES INCORPORATE ALL BASE PROPER PARKING BETWEEN THE FLIGHT LINE AND NORTH GATE.
SPACE HEATING	BASE HOUSING MOBILE HOMES PROPANE USERS
GROUND MOBILE*	SAME AREAS AS VEHICLE PARKING AND SPACE HEATING.

*VEHICULAR EMISSIONS WHICH OCCUR WHILE TRAVELING TO OR FROM A MAJOR ROADWAY (LINE SOURCE) ARE CONSIDERED AREA SOURCES.

TABLE V

LINE SOURCES AT NAS MIRAMAR

ROADWAY

MIRAMAR WAY
POLARIS AVENUE
MITSCHER WAY
JUPITER ROAD
RIGEL AVENUE
REGULUS AVENUE
RAVEN ROAD (PORTION PARALLEL TO FLIGHT LINE)

TABLE VI

ENVIRON SOURCES SURROUNDING NAS MIRAMAR

ROADWAYS

INTERSTATE 805
HIGHWAY 15
MIRAMAR ROAD

RESIDENTIAL AREAS*

INDUSTRIAL AREAS*

*RESIDENTIAL AND INDUSTRIAL SOURCES WERE MODELED USING LAND USE FACTORS SINCE A DATA BASE WAS NOT ESTABLISHED FOR THESE SOURCES.

result of an existing twenty-five year history of meteorological data and over eighty hours of observations of aircraft operations. These observations provided definition of taxi paths, parking areas, dwell time in various operating modes, and recognition of the need for a three-dimensional LTO cycle to adequately assess the contribution to air quality of Naval aircraft operations.

Later collections of data focused on the air station and the surrounding environment. Over sixty hours of data collection provided a sound data base for the air station. An adequate data base for the environment bordering NAS Miramar was not established except for the major highways bordering the air station.

Data were collected from existing records, by interviews and by observation. An extensive amount of raw data must be collected to describe each source. AQAM estimates of air quality are probably more dependent on the data input to the model than on any limitations to the simulations used to describe dispersion and operations [Ref. 6]. Since every air station is physically different, and possesses different aircraft and surroundings, a complete data survey is required to satisfy the input data requirements for each source.

VI. RESULTS AND DISCUSSION

Once modified, the Source Inventory Program and the Short-term Program provided an ambient air quality model for assessment of U.S. Naval aviation emittants. The model was utilized to conduct seven simulations of operations at NAS Miramar. These simulations are summarized in Table VII and permitted a parametric analysis of the relationships between the broad categories of aircraft, air base and environ sources. Finally, using the total sources, an attempt was made to distinguish the subtle interplay of the primary source categories to the overall ambient air quality about NAS Miramar.

The meteorological and temporal parameters were held constant for each case. These parameters are tabulated in Table VIII.

Case 1 was established as the base case and represented operations as they are normally conducted at NAS Miramar. Changes to the source parameters of Case 1 constituted the remaining cases. Case 2 provided a better estimate of the emissions from sources surrounding NAS Miramar. Land use factors were used to provide an order of magnitude estimate [Ref. 6] of these environ sources, since better data were not available. Case 3 removed the take off delay, pit refuel delay, hot refuel delay, pit refuel and hot refuel

TABLE VII

SIMULATIONS OF OPERATIONS AT NAS MIRAMAR

CASE	DESCRIPTION
1	BASE CASE. INCLUDES ALL AIRCRAFT SOURCES, AIR BASE SOURCES AND HIGHWAY TRAFFIC ADJACENT TO THE AIR BASE.
2	BASE CASE PLUS LAND USE FACTORS TO MODEL RESIDENTIAL/INDUSTRIAL ENVIRON SOURCES.
3	BASE CASE MINUS TAKE OFF DELAY, PIT REFUEL DELAY, HOT REFUEL DELAY, PIT REFUEL AND HOT REFUEL EMISSIONS.
4	BASE CASE EXCEPT TEST CELLS AND RUN UP STANDS EMITTING A FULL DAYS POLLUTION IN ONE HOUR, AIR BASE SOURCES ZEROED.
5	BASE CASE MINUS ENGINE TEST CELLS AND RUN UP STANDS.
6	BASE CASE PLUS HYDROCARBON WORKING LOSSES.
7	BASE CASE MINUS TAKE OFF DELAY, PIT REFUEL DELAY AND HOT REFUEL DELAY SOURCES.

TABLE VIII

METEOROLOGICAL AND TEMPORAL DATA

METEOROLOGICAL PARAMETERS

TEMPERATURE (DEGREES FAHRENHEIT)	65.0
MIXING DEPTH (METERS)	800.0
WIND DIRECTION (DEGREES)	200.0
WIND SPEED (METERS/SECOND)	2.57
STABILITY CATEGORY	2

TEMPORAL DATA

YEAR	1975
MONTH	MAY
PERIOD 1200-1300 HOURS ON A WEEKDAY	
HOUR INDEX	13

emissions. This procedure placed all refueling and servicing emissions in the aircraft parking areas, which was consistent with the original AQAM. Case 4 was a "worst case" study of the emissions from engine test cells and run up stands. As an approximation, the emissions for the entire day from each test cell/run-up stand were considered to be released in the hour under consideration. This corresponded to emissions from approximately eight minutes of operation for each run-up stand and eighty minutes of operation for each test cell. All other air base sources had zero emissions. Case 5 established the pollution caused by the air base without the engine test cells and run up stands in operation. Case 6 established the hydrocarbon working losses that would occur if vapor recovery systems were not utilized by NAS Miramar. Case 7 removed the take-off delay, pit refuel delay and hot refuel delay sources to study the effects of aircraft delays on ambient air quality.

The Source Inventory Program provides a summary of the annual emissions by source. This summary is presented in Tables IX through XI for Case 1. In addition, the effect of the environ sources when land use factors are added is depicted in Table XII. The parameters which define each case can be interpreted from these tables. Source Inventory summaries can only be used to establish the qualitative importance of a source to ambient air quality since the emissions have not been dispersed in time and space.

TABLE IX

CASE 1 - SUMMARY OF AIRCRAFT SOURCE EMISSIONS

SUMMARY OF ANNUAL EMISSIONS IN AIRCRAFT LTO MODES
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
STARTUP	8.979E 01	3.627E 01	4.623E 00	4.136E 01	1.252E-01
TAXI OUT	2.239E 02	8.912E 01	1.238E 01	1.252E 02	5.729E-02
TAKEOFF DLY	4.610E 02	1.768E 02	2.536E 01	2.544E 02	2.561E-01
ENGINE CHECK	4.548E 00	9.149E-01	1.100E 01	1.421E 01	7.654E-02
RUNWAY ROLL	9.648E 01	5.023E 00	3.764E 01	5.246E 01	1.681E-01
CLIMB (1+2)	1.180E 02	9.056E 00	8.454E 01	1.059E 02	1.383E-01
APPROACH IFR	3.401E 01	1.161E 01	8.325E 01	2.160E 02	7.650E-02
APPROACH VFR	4.325E 01	1.332E 01	1.107E 02	2.571E 02	1.198E-01
LANDING	6.628E 01	2.880E 01	3.482E 00	3.236E 01	4.600E-02
TAXI IN	8.242E 02	3.558E 02	4.355E 01	4.291E 02	3.059E-01
(HR+PIT) DLY	8.527E 01	3.383E 01	4.756E 00	4.959E 01	0.0
HOT REFUEL	2.634E 02	7.198E 01	1.678E 01	1.846E 02	0.0
SHUTDOWN	1.918E 02	8.331E 01	1.100E 01	1.021E 02	1.831E-02
ARR + DEP SV	4.399E 01	4.626E 00	2.142E 00	0.0	0.0
FUEL VENTING	0.0	0.0	0.0	0.0	0.0
FILL + SPILL	0.0	3.762E-01	0.0	0.0	0.0
TGO PATTERN	2.454E 01	7.676E 00	7.494E 01	1.294E 02	8.721E-02
FCLP PATTERN	6.793E 01	2.256E 01	2.106E 02	3.452E 02	0.0
PAD WORK	0.0	0.0	0.0	0.0	0.0
HOVER WORK	0.0	0.0	0.0	0.0	0.0
AUTOROTATION	0.0	0.0	0.0	0.0	0.0
TOTAL	2.638E 03	9.511E 02	7.367E 02	2.339E 03	1.475E 00

TABLE X

CASE 1 - SUMMARY OF AIR BASE SOURCE EMISSIONS

SUMMARY OF ANNUAL EMISSIONS FROM AIR BASE FACILITIES
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
TRAIN FIRES	2.096E 01	1.198E 01	1.553E-01	4.791E 00	0.0
TEST CELLS	1.587E 02	1.768E 01	1.094E 02	1.455E 02	0.0
RUN-UP STDS	4.799E-01	1.869E-01	4.587E-01	8.019E 00	3.893E-02
POWER PLANTS	5.120E-04	5.120E-02	2.248E-01	2.320E-02	7.680E-04
INCINERATORS	0.0	0.0	0.0	0.0	0.0
OTHER AB PTS	0.0	0.0	0.0	0.0	0.0
SPACE HEATING	2.880E-03	1.152E-03	1.765E-01	2.718E-03	8.640E-05
TOTAL	1.802E 02	2.990E 01	1.104E 02	1.584E 02	3.978E-02

SUMMARY OF ANNUAL EMISSIONS FROM EVAPORATIVE HYDROCARBONS
ALL LOSSES IN METRIC TONS

OPERATION	WORKING LOSS	FIXED ROOF BREATHING LOSS	FLOATING ROOF BREATHING LOSS	SPILLAGE	OTHER
STORAGE TANKS	6.418E 00	9.762E-01	0.0		
FILLING	0.0			0.0	
PET. STOR.TKS		3.280E 00	0.0		
TNK. TRUCK PK		6.175E-01			
VEH. PARKING		5.291E 01			
OTHERS					0.0

TOTAL EMISSIONS FROM EVAPORTIVE HYDROCARBONS IS 6.420E 01 METRIC TONS

TABLE X (CONTINUED)

SUMMARY OF ANNUAL EMISSIONS FROM GROUND MOBILE SOURCES
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
OFF ROAD VEH	1.526E 00	2.307E-01	2.759E 00	4.838E-02	9.677E-02
MILITARY VEH	0.0	0.0	0.0	0.0	0.0
CIVILIAN VEH	1.833E 01	1.703E 00	1.340E 00	2.333E-01	8.045E-02
MIL.VEH. LINE	0.0	0.0	0.0	0.0	0.0
CIV.VEH. LINE	3.293E 02	3.585E 01	6.007E 01	8.320E 00	2.869E 00
OTHER ABLINE	0.0	0.0	0.0	0.0	0.0
TOTAL	3.491E 02	3.778E 01	6.416E 01	8.602E 00	3.046E 00

TABLE XI

CASE 1 - SUMMARY OF ENVIRON AND TOTAL SOURCE EMISSIONS

SUMMARY OF ANNUAL EMISSIONS FROM ENVIRONS
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
ENVIRON PTS.	1.376E 01	2.000E-01	5.190E 00	0.0	0.0
ENV STA AREA	0.0	0.0	0.0	0.0	0.0
ENV MOB AREA	0.0	0.0	0.0	0.0	0.0
ENV LAND USE	0.0	0.0	0.0	0.0	0.0
ENV COM AREA	0.0	0.0	0.0	0.0	0.0
ENV ROAD WAY	4.850E 03	5.804E 02	1.616E 03	1.837E 02	6.333E 01
ENV NON-ROAD	0.0	0.0	0.0	0.0	0.0
TOTAL	4.864E 03	5.806E 02	1.621E 03	1.837E 02	6.333E 01

SUMMARY OF ALL ANNUAL EMISSIONS
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
AIRCRAFT	2.638E 03	9.511E 02	7.367E 02	2.339E 03	1.475E 00
GROUND MOBIL	3.491E 02	3.778E 01	6.416E 01	8.602E 00	3.046E 00
FACILITIES	1.802E 02	9.410E 01	1.104E 02	1.584E 02	3.978E-02
ENVIRONS	4.864E 03	5.806E 02	1.621E 03	1.837E 02	6.333E 01
GRANT TOTAL	8.032E 03	1.664E 03	2.533E 03	2.690E 03	6.789E 01

TABLE XI (CONTINUED)

PERCENT OF EMISSIONS FROM ALL SOURCES

OPERATION	CO	HC	NOX	PM	SOX
AIRCRAFT	32.848	57.171	29.089	86.964	2.173
GROUND MOBIL	4.347	2.271	2.533	0.320	4.487
FACILITIES	2.243	5.657	4.358	5.888	0.059
ENVIRONS	60.561	34.901	64.020	6.829	93.282

TABLE XII

CASE 2 - SUMMARY OF ENVIRON AND TOTAL SOURCE EMISSIONS

OPERATION	CO	HC	NOX	PM	SOX
ENVIRON PTS.	1.376E 01	2.000E-01	5.190E 00	0.0	0.0
ENV STA AREA	0.0	0.0	0.0	0.0	0.0
ENV MOB AREA	0.0	0.0	0.0	0.0	0.0
ENV LAND USE	9.278E 04	1.792E 04	7.215E 03	3.024E 03	3.864E 03
ENV COM AREA	0.0	0.0	0.0	0.0	0.0
ENV ROAD WAY	4.850E 03	5.804E 02	1.616E 03	1.837E 02	6.333E 01
ENV NON-ROAD	0.0	0.0	0.0	0.0	0.0
TOTAL	9.764E 04	1.850E 04	8.836E 03	3.207E 03	3.927E 03

SUMMARY OF ALL ANNUAL EMISSIONS
ALL POLLUTANTS IN METRIC TONS

OPERATION	CO	HC	NOX	PM	SOX
AIRCRAFT	2.638E 03	9.511E 02	7.367E 02	2.339E 03	1.475E 00
GROUND MOBIL	3.491E 02	3.778E 01	6.416E 01	8.602E 00	3.046E 00
FACILITIES	1.802E 02	9.410E 01	1.104E 02	1.584E 02	3.978E-02
ENVIRONS	9.764E 04	1.850E 04	8.836E 03	3.207E 03	3.927E 03
GRAND TOTAL	1.008E 05	1.958E 04	9.747E 03	5.713E 03	3.932E 03

TABLE XII (CONTINUED)

PERCENT OF EMISSIONS FROM ALL SOURCES

OPERATION	CO	HC	NOX	PM	SOX
AIRCRAFT	2.617	4.856	7.558	40.939	0.038
GROUND MOBIL	0.346	0.193	0.658	0.151	0.077
FACILITIES	0.179	0.481	1.132	2.772	0.001
ENVIRONS	96.858	94.470	90.651	56.138	99.884

The Short-term Program takes the source data, emission strengths, meteorological data and temporal data and disperses the source emissions in time and space. These concentrations, which are collected over the receptor grid system, determine a sources contribution to ambient air quality.

Table XIII compares the maximum 1-hour receptor concentration from aircraft sources at NAS Miramar. For the receptor locations employed, removing aircraft delays (Case 7) reduced the maximum pollutant concentrations by only 2 per cent. However, Table IX shows that elimination of aircraft delays can reduce CO and HC yearly emissions by approximately 21 per cent and particulates by approximately 13 per cent. Case 3 eliminates the aircraft delays and puts all refueling in the parking areas. The maximum hourly concentrations occurred at the same receptor location (12, 9) as for Cases 1 and 7, but increased by approximately 17 per cent. This higher concentration results from receptor (12, 9) being located nearer to the parking area than to the hot refueling or pit refueling areas. Comparison of Cases 1, 3, and 7 shows that refueling in the parking areas increases the local ambient air concentrations of each pollutant in the parking area but decreases annual emissions of each pollutant by approximately 8 per cent. Locations of pertinent receptors are presented in Figure 4.

Table XIV compares the maximum 1-hour receptor concentration from air base sources at NAS Miramar. Case 1 and Case 5,

TABLE XIII

MAXIMUM 1-HOUR RECEPTOR CONCENTRATION (CHI) FROM AIRCRAFT SOURCES AT NAS MIRAMAR

POLLUTANT	CASE 1			CASE 3			CASE 7		
	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)
CARBON MONOXIDE	12.0	9.0	214.8	12.0	9.0	250.2	12.0	9.0	213.2
HYDROCARBONS	12.0	9.0	80.99	12.0	9.0	95.03	12.0	9.0	79.64
OXIDES OF NITROGEN	12.0	9.0	17.77	12.0	9.0	18.87	12.0	9.0	17.71
PARTICULATES	12.0	9.0	125.1	12.0	9.0	126.3	12.0	9.0	124.8
OXIDES OF SULFUR	12.0	9.0	0.04087	12.0	9.0	0.04087	12.0	9.0	0.04087

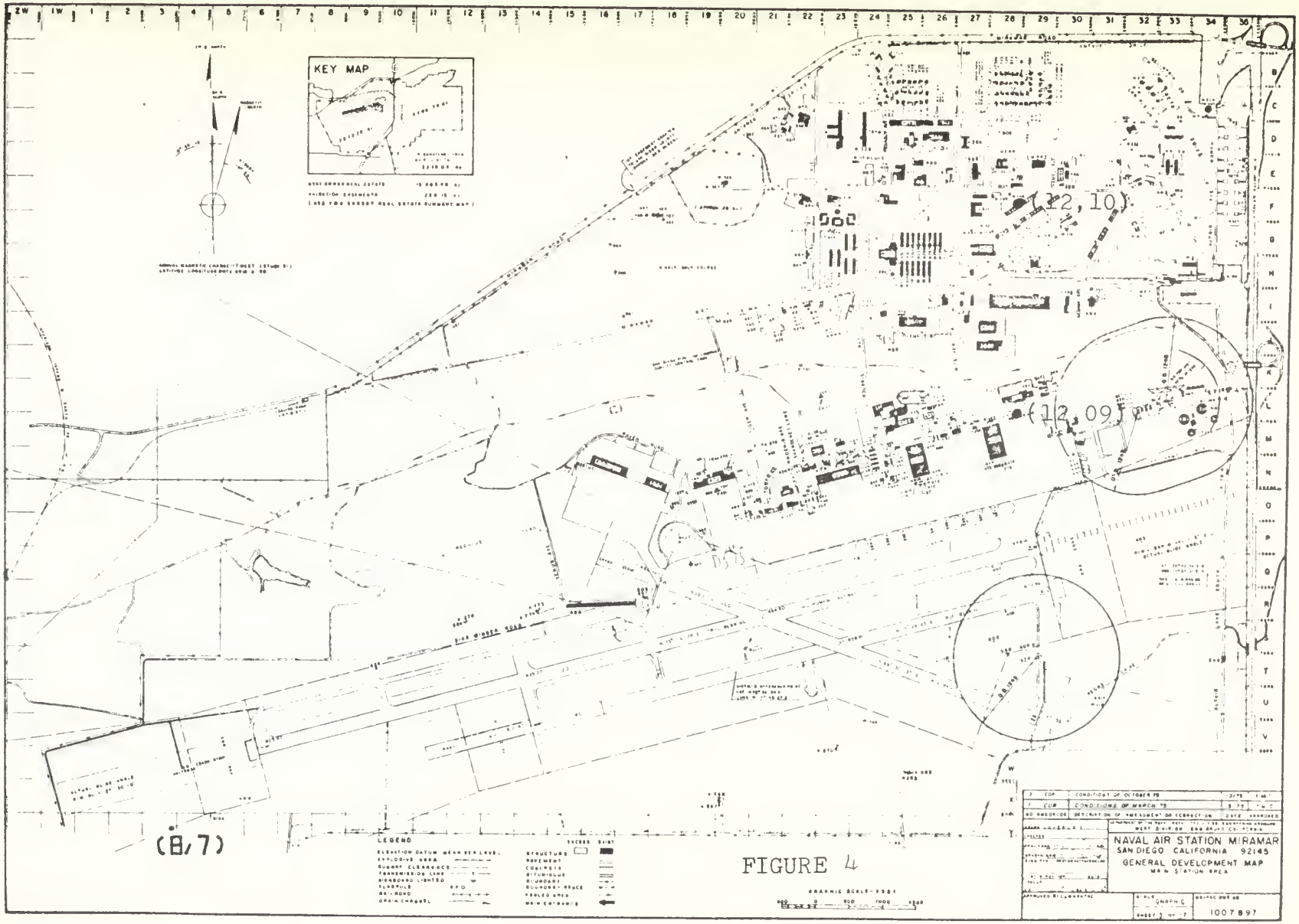

KEY MAP
(12,10)
(12,09)
(8,7)
NAVAL AIR STATION MIRAMAR
SAN DIEGO CALIFORNIA 92145
GENERAL DEVELOPMENT MAP
MAIN STATION AREA
1007897

FIGURE 4

TABLE XIV

MAXIMUM 1-HOUR RECEPTOR CONCENTRATION (CHI) FROM AIR BASE SOURCES AT NAS MIRAMAR

POLLUTANT	CASE 1			CASE 4			CASE 5			CASE 6		
	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)
CARBON MONOXIDE	13.0	11.0	4.167	13.0	11.0	44.29	12.0	10.0	1.177	13.0	11.0	4.167
HYDRO-CARBONS	12.0	10.0	8.668	13.0	11.0	4.985	12.0	10.0	8.580	12.0	10.0	11.30
OXIDES OF NITROGEN	13.0	11.0	2.636	12.0	11.0	30.39	12.0	10.0	0.4027	13.0	11.0	2.636
PARTICU-LATES	13.0	11.0	3.703	13.0	11.0	44.37	12.0	10.0	0.01711	13.0	11.0	3.703
OXIDES OF SULFUR	12.0	10.0	0.01713	13.0	11.0	0.02135	12.0	10.0	0.01566	12.0	10.0	0.01713

together, indicate that the maximum local ambient concentrations (from air base sources) of carbon monoxide, oxides of nitrogen and particulates result, for this particular time period, from the engine test cells and run up stands. Source Inventory for these two cases also shows that test cell/run up stand operation contributes 30%, 14%, 63%, and 92% of the annual air base emissions of CO, HC, NOX and particulates, respectively. However, these values (when compared to the standards depicted in Table XV) indicate that test cells and run up stands by themselves produce less than one per cent of the 1-hour ambient air quality standards. The "worst case" (Case 4) values for engine test cells and run up stands are less than 7 per cent of the 1-hour ambient air quality standards.

Case 1 and Case 6, together, depict the reduction in hydrocarbon emissions which result from the recent installation of vapor recovery systems at NAS Miramar. These systems caused a 30 per cent reduction in both the maximum receptor concentration and yearly total emissions of air base evaporative hydrocarbons.

Table XVI compares the maximum 1-hour receptor concentration from environ sources surrounding NAS Miramar. Case 1 included the vehicular traffic emissions on Interstate 805, Highway 15 and Miramar Road. A sound data base exists for these sources. Case 2 included these emissions plus the emissions due to industrial and residential activity based on Land Use factors. Reference 6 cautions that the Land Use

TABLE XV

AMBIENT AIR QUALITY STANDARDS
(From Ref. 13)

POLLUTANT	STANDARDS $\mu g/m^3$	
	California	Federal Primary
CARBON MONOXIDE	46,000[1]	40,000[1]
OXIDES OF NITROGEN	470[1]	100[4]
HYDROCARBONS	NONE	160[2]
PARTICULATES	100[3]	260[3]
OXIDES OF SULFUR	1,310[1]	365[3]

1. 1-hour concentration not to be exceeded more than once per year.
2. 3-hour concentration not to be exceeded more than once per year.
3. 24-hour concentration not to be exceeded more than once per year.
4. Annual arithmetric mean.

TABLE XVI

MAXIMUM 1-HOUR RECEPTOR CONCENTRATION (CHI) FROM ENVIRON SOURCES NEAR NAS MIRAMAR

POLLUTANT	CASE 1			CASE 2		
	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)
CARBON MONOXIDE	13.0	13.0	8.507	11.0	5.0	650.7
HYDROCARBONS	10.0	12.0	1.081E-03	11.0	3.0	202.2
OXIDES OF NITROGEN	10.0	12.0	2.806E-02	11.0	3.0	56.35
PARTICULATES	13.0	13.0	1.855E-04	11.0	3.0	49.10
OXIDES OF SULFUR	13.0	13.0	8.746E-06	11.0	5.0	59.63

factors utilized to define environ activity can provide only an order of magnitude estimate of the actual concentration of pollutants. Therefore, the results for Case 2 in Table XVI may not be accurate and should be used with caution.

Table XVII presents data from all sources for cases 1 and 2. Again, the unreliability of the Land Use factors to accurately describe the environ sources prevents an accurate estimation of the interplay between aircraft and air base sources with the environ sources. The Table does indicate that aircraft sources dominate the maximum pollutant concentration's on the air base and dominate the maximum concentration of particulates throughout the receptor grid system. More data are required to define the environment prior to establishing the interplay of the three emission sources.

To permit analysis of more than just those receptors with maximum pollutant concentrations the entire receptor grid system for each primary source category is presented as Appendix A for Case 2.

TABLE XVII

MAXIMUM 1-HOUR RECEPTOR CONCENTRATION (CHI) FROM TOTAL* SOURCES ABOUT NAS MIRAMAR

POLLUTANT	CASE 1			CASE 2		
	X (km)	Y (km)	CHI ($\mu g/m^3$)	X (km)	Y (km)	CHI ($\mu g/m^3$)
CARBON MONOXIDE	12.0	9.0	215.2	11.0	5.0	650.8
HYDROCARBONS	12.0	9.0	81.37	11.0	3.0	202.2
OXIDES OF NITROGEN	12.0	9.0	17.79	11.0	3.0	56.35
PARTICULATES	12.0	9.0	125.1	12.0	9.0	129.5
OXIDES OF SULFUR	12.0	10.0	0.05178	11.0	5.0	59.63

*AIRCRAFT + AIR BASE + ENVIRONS

VII. CONCLUSIONS AND RECOMMENDATIONS

Modifications to AQAM have enhanced the accuracy for predictions related to U.S. Naval Aircraft operations. The capacity of the air quality model to qualitatively relate the various emission sources exists at this stage in the model's development. The capacity of the model to quantitatively predict the ambient air quality through space and time must yet be verified by actual measurement.

The model can assist in the verification process. For a given set of meteorological data and temporal distributions the model can indicate the best receptor locations for optimizing data collection devices. Using the meteorological and temporal parameters of Table VIII and Cases 1 through 7, the best locations for receptors appear to be just south of the jet engine maintenance shop, just north of toyland and just north of the Miramar Road/Highway 15 intersection.

Before the interplay of aircraft, air base and environ emissions can be established at NAS Miramar a data base for the environ sources must be established. In addition, the data base for the aircraft and air base sources must be updated to represent 1976. Recurring updates of any data base must occur or the quantitative results of the model will not represent the actual situation.

The model should be modified to provide contour mapping of pollutant concentrations over the grid of receptors. Parametric studies conducted under differing meteorological and temporal distributions could then be visualized to indicate sources of high, medium and low concentrations. Then, parametric studies could be conducted by varying operational factors and source parameters to establish the combination which would provide the lowest pollution level.

APPENDIX A - AIRCRAFT, AIR BASE, ENVIRON AND TOTAL GRID RECEPTOR CONCENTRATIONS FOR CASE 2

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	1.00	0.0	0.0	0.0	0.0	0.0
3	0.0	2.00	0.0	0.0	0.0	0.0	0.0
4	0.0	3.00	-3.487E-07	-6.117E-08	-2.641E-08	-1.022E-08	-1.508E-08
5	0.0	4.00	2.232E-03	3.916E-04	1.691E-04	6.543E-05	9.653E-05
6	0.0	5.00	9.137E-04	1.603E-04	6.919E-05	2.678E-05	3.951E-05
7	0.0	6.00	-2.437E-03	-4.305E-04	-1.744E-04	-2.212E-05	-3.535E-05
8	0.0	7.00	3.299E 01	5.823E 00	2.376E 00	5.007E-01	8.585E-01
9	0.0	8.00	2.655E 01	4.688E 00	1.914E 00	4.025E-01	4.756E-01
10	0.0	9.00	2.027E 01	3.578E 00	1.461E 00	3.076E-01	3.662E-01
11	0.0	10.00	1.482E 01	2.616E 00	1.069E 00	2.250E-01	2.678E-01
12	0.0	11.00	5.809E 00	1.025E 00	4.188E-01	8.818E-02	1.050E-01
13	0.0	12.00	3.362E 00	5.934E-01	2.424E-01	5.106E-02	6.080E-02
14	0.0	13.00	2.594E 00	4.578E-01	1.870E-01	3.943E-02	4.697E-02
15	0.0	14.00	2.496E 00	4.405E-01	1.800E-01	3.795E-02	4.528E-02
16	0.0	15.00	2.402E 00	4.240E-01	1.732E-01	3.651E-02	4.367E-02
17	1.00	0.0	0.0	0.0	0.0	0.0	0.0
18	1.00	1.00	0.0	0.0	0.0	0.0	0.0
19	1.00	2.00	0.0	0.0	0.0	0.0	0.0
20	1.00	3.00	-3.968E-06	-6.961E-07	-3.005E-07	-1.163E-07	-1.716E-07
21	1.00	4.00	2.997E-02	5.257E-03	2.269E-03	8.784E-04	1.296E-03
22	1.00	5.00	3.950E 01	6.972E 00	2.848E 00	5.997E-01	7.128E-01
23	1.00	6.00	7.434E 01	1.312E 01	5.359E 00	1.128E 00	1.343E 00
24	1.00	7.00	6.828E 01	1.205E 01	4.921E 00	1.036E 00	1.233E 00
25	1.00	8.00	5.855E 01	1.033E 01	4.221E 00	8.886E-01	1.058E 00
26	1.00	9.00	4.777E 01	8.431E 00	3.443E 00	7.250E-01	8.629E-01
27	1.00	10.00	3.752E 01	6.622E 00	2.705E 00	5.695E-01	6.779E-01
28	1.00	11.00	1.237E 01	2.183E 00	8.917E-01	1.877E-01	2.238E-01
29	1.00	12.00	7.752E 00	1.368E 00	5.589E-01	1.177E-01	1.405E-01
30	1.00	13.00	6.229E 00	1.099E 00	4.491E-01	9.453E-02	1.132E-01
31	1.00	14.00	5.709E 00	1.008E 00	4.117E-01	8.724E-02	1.042E-01
32	1.00	15.00	5.258E 00	9.280E-01	3.792E-01	8.055E-02	9.633E-02
33	2.00	0.0	0.0	0.0	0.0	0.0	0.0
34	2.00	1.00	0.0	0.0	0.0	0.0	0.0
35	2.00	2.00	0.0	0.0	0.0	0.0	0.0
36	2.00	3.00	-3.750E-05	-6.578E-06	-2.839E-06	-1.059E-06	-1.621E-06
37	2.00	4.00	2.890E-01	5.069E-02	2.188E-02	8.469E-03	1.249E-02

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
38	2.00	5.00	1.364E-01	2.352E-02	1.036E-02	4.105E-03	6.088E-03
39	2.00	6.00	1.181E 02	2.085E 01	8.515E 00	1.754E 00	2.135E 00
40	2.00	7.00	1.146E 02	2.022E 01	8.256E 00	1.739E 00	2.070E 00
41	2.00	8.00	1.050E 02	1.853E 01	7.566E 00	1.594E 00	1.897E 00
42	2.00	9.00	9.175E 01	1.619E 01	6.613E 00	1.393E 00	1.658E 00
43	2.00	10.00	5.510E 01	9.725E 00	3.972E 00	8.370E-01	9.956E-01
44	2.00	11.00	2.177E 01	3.843E 00	1.570E 00	3.316E-01	3.954E-01
45	2.00	12.00	1.437E 01	2.536E 00	1.036E 00	2.195E-01	2.621E-01
46	2.00	13.00	1.218E 01	2.150E 00	8.786E-01	1.866E-01	2.222E-01
47	2.00	14.00	1.086E 01	1.916E 00	7.833E-01	1.666E-01	1.996E-01
48	2.00	15.00	9.824E 00	1.734E 00	7.090E-01	1.521E-01	1.826E-01
49	3.00	0.0	0.0	0.0	0.0	0.0	0.0
50	3.00	1.00	0.0	0.0	0.0	0.0	0.0
51	3.00	2.00	-3.002E-04	-5.266E-05	-2.273E-05	-8.795E-06	-1.298E-05
52	3.00	3.00	3.355E 00	5.885E-01	2.540E-01	9.833E-02	1.451E-01
53	3.00	4.00	2.011E 00	3.527E-01	1.523E-01	5.894E-02	8.694E-02
54	3.00	5.00	1.106E 00	1.940E-01	8.375E-02	3.256E-02	4.807E-02
55	3.00	6.00	1.527E 02	2.695E 01	1.101E 01	2.324E 00	2.770E 00
56	3.00	7.00	1.569E 02	2.770E 01	1.131E 01	2.385E 00	2.841E 00
57	3.00	8.00	1.534E 02	2.707E 01	1.106E 01	2.331E 00	2.776E 00
58	3.00	9.00	1.438E 02	2.538E 01	1.037E 01	2.186E 00	2.604E 00
59	3.00	10.00	5.835E 01	1.030E 01	4.207E 00	8.906E-01	1.062E 00
60	3.00	11.00	3.165E 01	5.586E 00	2.283E 00	4.855E-01	5.806E-01
61	3.00	12.00	2.273E 01	4.011E 00	1.640E 00	3.506E-01	4.206E-01
62	3.00	13.00	1.996E 01	3.522E 00	1.440E 00	3.050E-01	3.714E-01
63	3.00	14.00	1.768E 01	3.120E 00	1.276E 00	2.749E-01	3.310E-01
64	3.00	15.00	1.616E 01	2.852E 00	1.166E 00	2.562E-01	3.114E-01
65	4.00	0.0	0.0	0.0	0.0	0.0	0.0
66	4.00	1.00	0.0	0.0	0.0	0.0	0.0
67	4.00	2.00	-1.562E-03	-2.740E-04	-1.183E-04	-4.578E-05	-6.753E-05
68	4.00	3.00	1.540E 01	2.701E 00	1.166E 00	4.512E-01	6.657E-01
69	4.00	4.00	1.016E 01	1.783E 00	7.696E-01	2.978E-01	4.396E-01
70	4.00	5.00	1.406E 02	2.468E 01	1.015E 01	2.222E 00	2.697E 00
71	4.00	6.00	1.607E 02	2.837E 01	1.159E 01	2.476E 00	2.958E 00
72	4.00	7.00	1.755E 02	3.097E 01	1.265E 01	2.682E 00	3.204E 00
73	4.00	8.00	1.830E 02	3.221E 01	1.320E 01	2.794E 00	3.335E 00
74	4.00	9.00	1.844E 02	3.254E 01	1.329E 01	2.814E 00	3.359E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
75	4.00	10.00	6.165E 01	1.088E 01	4.44EE 00	9.526E-01	1.144E 00
76	4.00	11.00	4.294E 01	7.559E 00	3.095E 00	6.697E-01	8.028E-01
77	4.00	12.00	3.258E 01	5.744E 00	2.352E 00	5.12CE-01	6.185E-01
78	4.00	13.00	2.861E 01	5.046E 00	2.066E 00	4.517E-01	5.474E-01
79	4.00	14.00	2.805E 01	4.945E 00	2.034E 00	4.719E-01	5.879E-01
80	4.00	15.00	2.461E 01	4.342E 00	1.784E 00	4.1C6E-01	5.097E-01
81	5.00	0.0	0.0	0.0	0.0	0.0	0.0
82	5.00	1.00	1.886E 01	3.305E 00	1.426E 00	5.52EE-01	8.155E-01
83	5.00	2.00	-4.432E-03	-7.775E-04	-3.356E-04	-1.295E-04	-1.916E-04
84	5.00	3.00	5.082E 01	8.916E 00	3.845E 00	1.49CE 00	2.198E 00
85	5.00	4.00	3.728E 01	6.539E 00	2.822E 00	1.093E 00	1.612E 00
86	5.00	5.00	1.377E 02	2.428E 01	1.002E 01	2.454E 00	3.127E 00
87	5.00	6.00	1.437E 02	2.536E 01	1.035E 01	2.292E 00	2.794E 00
88	5.00	7.00	1.626E 02	2.869E 01	1.174E 01	2.536E 00	3.059E 00
89	5.00	8.00	1.802E 02	3.181E 01	1.301E 01	2.750E 00	3.353E 00
90	5.00	9.00	1.163E 02	2.053E 01	8.40CE 00	1.817E 00	2.194E 00
91	5.00	10.00	5.875E 01	1.037E 01	4.247E 00	9.403E-01	1.148E 00
92	5.00	11.00	7.950E 01	1.386E 01	5.705E 00	1.269E 00	1.503E 00
93	5.00	12.00	4.666E 01	8.194E 00	3.366E 00	7.554E-01	9.169E-01
94	5.00	13.00	3.852E 01	6.780E 00	2.784E 00	6.294E-01	7.713E-01
95	5.00	14.00	4.339E 01	7.649E 00	3.165E 00	8.067E-01	1.043E 00
96	5.00	15.00	3.744E 01	6.601E 00	2.726E 00	6.857E-01	8.813E-01
97	6.00	0.0	0.0	0.0	0.0	0.0	0.0
98	6.00	1.00	-8.255E-03	-1.448E-03	-6.251E-04	-2.42CE-04	-3.569E-04
99	6.00	2.00	1.379E 02	2.420E 01	1.045E 01	4.043E 00	5.964E 00
100	6.00	3.00	1.212E 02	2.127E 01	9.181E 00	3.554E 00	5.242E 00
101	6.00	4.00	9.910E 01	1.738E 01	7.505E 00	2.905E 00	4.285E 00
102	6.00	5.00	1.192E 02	2.099E 01	8.775E 00	2.903E 00	3.389E 00
103	6.00	6.00	1.360E 02	2.407E 01	9.891E 00	2.351E 00	2.974E 00
104	6.00	7.00	1.335E 02	2.358E 01	9.673E 00	2.200E 00	2.723E 00
105	6.00	8.00	1.513E 02	2.671E 01	1.094E 01	2.437E 00	2.984E 00
106	6.00	9.00	1.034E 02	1.808E 01	7.441E 00	1.695E 00	2.061E 00
107	6.00	10.00	1.316E 02	2.285E 01	9.424E 00	2.122E 00	2.504E 00
108	6.00	11.00	1.456E 02	2.521E 01	1.051E 01	2.694E 00	3.261E 00
109	6.00	12.00	6.256E 01	1.094E 01	4.534E 00	1.136E 00	1.435E 00
110	6.00	13.00	4.953E 01	8.693E 00	3.596E 00	8.543E-01	1.134E 00
111	6.00	14.00	7.100E 01	1.251E 01	5.226E 00	1.507E 00	2.020E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
112	6.00	15.00	6.044E 01	1.065E 01	4.445E 00	1.264E 00	1.695E 00
113	7.00	0.0	0.0	0.0	0.0	0.0	0.0
114	7.00	1.00	-1.474E-02	-2.585E-03	-1.116E-03	-4.320E-04	-6.372E-04
115	7.00	2.00	2.165E 02	3.798E 01	1.640E 01	6.346E 00	9.362E 00
116	7.00	3.00	2.104E 02	3.691E 01	1.593E 01	6.167E 00	9.097E 00
117	7.00	4.00	2.157E 02	3.786E 01	1.634E 01	5.976E 00	8.709E 00
118	7.00	5.00	1.042E 02	1.833E 01	7.755E 00	2.535E 00	3.580E 00
119	7.00	6.00	1.785E 02	3.183E 01	1.307E 01	3.253E 00	4.214E 00
120	7.00	7.00	1.102E 02	1.949E 01	8.040E 00	2.005E 00	2.587E 00
121	7.00	8.00	1.163E 02	2.052E 01	8.450E 00	2.038E 00	2.588E 00
122	7.00	9.00	2.012E 02	3.464E 01	1.550E 01	7.464E 00	1.122E 01
123	7.00	10.00	2.548E 02	4.373E 01	1.962E 01	9.536E 00	1.432E 01
124	7.00	11.00	1.889E 02	3.249E 01	1.447E 01	6.761E 00	1.008E 01
125	7.00	12.00	8.002E 01	1.354E 01	5.951E 00	2.066E 00	2.859E 00
126	7.00	13.00	1.376E 02	2.420E 01	1.025E 01	3.408E 00	4.779E 00
127	7.00	14.00	1.196E 02	2.108E 01	8.859E 00	2.893E 00	4.032E 00
128	7.00	15.00	1.026E 02	1.809E 01	7.625E 00	2.443E 00	3.389E 00
129	8.00	0.0	1.029E 02	1.804E 01	7.789E 00	3.015E 00	4.447E 00
130	8.00	1.00	2.071E 02	3.634E 01	1.569E 01	6.072E 00	8.957E 00
131	8.00	2.00	2.448E 02	4.294E 01	1.854E 01	7.175E 00	1.058E 01
132	8.00	3.00	2.645E 02	4.640E 01	2.003E 01	7.752E 00	1.144E 01
133	8.00	4.00	2.779E 02	4.882E 01	2.102E 01	8.019E 00	1.177E 01
134	8.00	5.00	1.585E 02	2.818E 01	1.177E 01	3.554E 00	4.913E 00
135	8.00	6.00	1.198E 02	2.134E 01	8.856E 00	2.514E 00	3.399E 00
136	8.00	7.00	8.713E 01	1.547E 01	6.430E 00	1.834E 00	2.471E 00
137	8.00	8.00	6.569E 01	1.167E 01	4.863E 00	1.442E 00	1.960E 00
138	8.00	9.00	5.311E 01	9.451E 00	3.941E 00	1.202E 00	1.637E 00
139	8.00	10.00	3.639E 02	6.232E 01	2.857E 01	1.588E 01	2.423E 01
140	8.00	11.00	1.877E 02	3.234E 01	1.455E 01	7.478E 00	1.133E 01
141	8.00	12.00	9.846E 01	1.715E 01	7.506E 00	3.255E 00	4.779E 00
142	8.00	13.00	2.132E 02	3.757E 01	1.602E 01	5.788E 00	8.269E 00
143	8.00	14.00	1.922E 02	3.392E 01	1.442E 01	5.077E 00	7.208E 00
144	8.00	15.00	1.699E 02	3.000E 01	1.273E 01	4.421E 00	6.250E 00
145	9.00	0.0	-7.255E-03	-1.273E-03	-5.494E-04	-2.127E-04	-3.137E-04
146	9.00	1.00	1.552E 02	2.723E 01	1.175E 01	4.549E 00	6.711E 00
147	9.00	2.00	2.004E 02	3.516E 01	1.518E 01	5.874E 00	8.665E 00
148	9.00	3.00	2.558E 02	5.133E 01	2.035E 01	9.166E 00	1.181E 01

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
149	9.00	4.00	2.085E 02	3.770E 01	1.636E 01	8.183E 00	1.197E 01
150	9.00	5.00	1.220E 02	2.198E 01	9.504E 00	4.535E 00	6.605E 00
151	9.00	6.00	7.690E 01	1.402E 01	5.888E 00	2.272E 00	3.323E 00
152	9.00	7.00	6.896E 01	1.258E 01	5.236E 00	1.946E 00	2.676E 00
153	9.00	8.00	5.728E 01	1.051E 01	4.361E 00	1.641E 00	2.249E 00
154	9.00	9.00	5.286E 01	9.719E 00	4.022E 00	1.495E 00	2.035E 00
155	9.00	10.00	2.081E 02	3.558E 01	1.654E 01	8.764E 00	1.329E 01
156	9.00	11.00	2.129E 02	3.690E 01	1.676E 01	9.056E 00	1.376E 01
157	9.00	12.00	1.065E 02	1.877E 01	8.255E 00	3.926E 00	5.796E 00
158	9.00	13.00	2.886E 02	5.107E 01	2.182E 01	8.185E 00	1.175E 01
159	9.00	14.00	2.743E 02	4.858E 01	2.070E 01	7.605E 00	1.086E 01
160	9.00	15.00	2.542E 02	4.503E 01	1.915E 01	6.954E 00	9.900E 00
161	10.00	0.0	-3.810E-03	-6.683E-04	-2.885E-04	-1.117E-04	-1.647E-04
162	10.00	1.00	8.337E 01	1.462E 01	6.313E 00	2.443E 00	3.605E 00
163	10.00	2.00	1.203E 02	2.053E 01	9.036E 00	3.495E 00	5.157E 00
164	10.00	3.00	2.796E 02	1.008E 02	2.899E 01	2.159E 01	1.806E 01
165	10.00	4.00	1.032E 02	2.974E 01	9.571E 00	6.025E 00	5.785E 00
166	10.00	5.00	3.285E 02	6.004E 01	2.723E 01	1.687E 01	2.825E 01
167	10.00	6.00	1.114E 02	2.166E 01	9.181E 00	5.682E 00	8.036E 00
168	10.00	7.00	7.611E 01	1.511E 01	6.181E 00	3.368E 00	4.568E 00
169	10.00	8.00	6.262E 01	1.250E 01	5.042E 00	2.562E 00	3.404E 00
170	10.00	9.00	6.495E 01	1.268E 01	5.181E 00	2.560E 00	3.455E 00
171	10.00	10.00	7.633E 01	1.425E 01	5.956E 00	2.942E 00	4.087E 00
172	10.00	11.00	3.078E 02	5.479E 01	2.366E 01	1.029E 01	1.458E 01
173	10.00	12.00	3.242E 02	5.781E 01	2.473E 01	9.886E 00	1.421E 01
174	10.00	13.00	3.326E 02	5.930E 01	2.526E 01	9.681E 00	1.382E 01
175	10.00	14.00	3.358E 02	5.982E 01	2.544E 01	9.566E 00	1.363E 01
176	10.00	15.00	3.288E 02	5.855E 01	2.488E 01	9.261E 00	1.318E 01
177	11.00	0.0	1.867E 01	3.276E 00	1.414E 00	5.474E-01	8.075E-01
178	11.00	1.00	9.057E 01	4.143E 01	1.074E 01	9.262E 00	6.879E 00
179	11.00	2.00	2.769E 02	1.474E 02	3.595E 01	3.368E 01	2.344E 01
180	11.00	3.00	4.996E 02	2.022E 02	5.635E 01	4.910E 01	4.252E 01
181	11.00	4.00	5.989E 02	1.226E 02	5.184E 01	3.867E 01	5.431E 01
182	11.00	5.00	6.507E 02	1.189E 02	5.442E 01	3.965E 01	5.963E 01
183	11.00	6.00	1.605E 02	3.315E 01	1.374E 01	9.679E 00	1.338E 01
184	11.00	7.00	9.723E 01	2.108E 01	8.345E 00	5.544E 00	7.295E 00
185	11.00	8.00	7.668E 01	1.681E 01	6.532E 00	4.087E 00	5.244E 00

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES						
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS)		EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER)				
	X	Y	CO	HC	NOX	PT	SO2
186	11.00	9.00	6.879E 01	1.487E 01	5.785E 00	3.429E 00	4.286E 00
187	11.00	10.00	6.514E 01	1.379E 01	5.404E 00	3.041E 00	3.905E 00
188	11.00	11.00	6.839E 01	1.354E 01	5.566E 00	3.010E 00	3.948E 00
189	11.00	12.00	2.797E 02	5.058E 01	2.143E 01	6.565E 00	1.159E 01
190	11.00	13.00	3.157E 02	5.711E 01	2.410E 01	9.426E 00	1.227E 01
191	11.00	14.00	3.479E 02	6.259E 01	2.645E 01	1.011E 01	1.426E 01
192	11.00	15.00	3.615E 02	6.486E 01	2.745E 01	1.039E 01	1.469E 01
193	12.00	0.0	4.781E 00	8.387E-01	3.620E-01	1.401E-01	2.067E-01
194	12.00	1.00	9.073E 00	1.590E 00	6.869E-01	2.656E-01	3.921E-01
195	12.00	2.00	1.070E 02	5.864E 01	1.417E 01	1.345E 01	9.252E 00
196	12.00	3.00	8.530E 01	4.596E 01	1.117E 01	1.052E 01	7.283E 00
197	12.00	4.00	2.910E 02	6.555E 01	2.563E 01	1.862E 01	2.411E 01
198	12.00	5.00	2.079E 02	4.534E 01	1.822E 01	1.340E 01	1.754E 01
199	12.00	6.00	1.319E 02	2.959E 01	1.141E 01	8.309E 00	1.066E 01
200	12.00	7.00	9.482E 01	2.263E 01	8.472E 00	6.027E 00	7.484E 00
201	12.00	8.00	8.259E 01	1.957E 01	7.308E 00	5.023E 00	6.191E 00
202	12.00	9.00	7.594E 01	1.764E 01	6.636E 00	4.356E 00	5.435E 00
203	12.00	10.00	1.304E 02	2.664E 01	1.059E 01	5.457E 00	7.085E 00
204	12.00	11.00	1.815E 02	3.514E 01	1.431E 01	6.498E 00	8.673E 00
205	12.00	12.00	2.409E 02	4.517E 01	1.860E 01	7.613E 00	1.027E 01
206	12.00	13.00	2.830E 02	5.224E 01	2.165E 01	8.545E 00	1.167E 01
207	12.00	14.00	3.151E 02	5.761E 01	2.407E 01	9.346E 00	1.291E 01
208	12.00	15.00	3.426E 02	6.224E 01	2.613E 01	1.004E 01	1.398E 01
209	13.00	0.0	8.790E-01	1.542E-01	6.656E-02	2.576E-02	3.800E-02
210	13.00	1.00	1.850E 00	3.245E-01	1.401E-01	5.421E-02	7.995E-02
211	13.00	2.00	5.434E 01	1.352E 01	4.527E 00	2.161E 00	1.724E 00
212	13.00	3.00	7.744E 01	1.841E 01	6.305E 00	2.816E 00	2.265E 00
213	13.00	4.00	1.156E 02	2.584E 01	9.429E 00	4.751E 00	4.505E 00
214	13.00	5.00	8.368E 01	2.071E 01	7.324E 00	4.521E 00	4.540E 00
215	13.00	6.00	7.829E 01	1.990E 01	7.041E 00	4.760E 00	5.391E 00
216	13.00	7.00	7.153E 01	1.848E 01	6.497E 00	4.637E 00	5.307E 00
217	13.00	8.00	7.502E 01	1.813E 01	6.470E 00	4.572E 00	5.221E 00
218	13.00	9.00	7.571E 01	1.769E 01	6.429E 00	4.443E 00	5.089E 00
219	13.00	10.00	7.573E 01	1.694E 01	6.240E 00	4.192E 00	5.057E 00
220	13.00	11.00	1.387E 02	2.765E 01	1.051E 01	5.623E 00	7.214E 00
221	13.00	12.00	1.646E 02	3.156E 01	1.267E 01	6.042E 00	7.905E 00
222	13.00	13.00	2.510E 02	4.591E 01	1.871E 01	7.465E 00	9.812E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
223	13.00	14.00	2.694E 02	5.023E 01	2.065E 01	8.065E 00	1.081E 01
224	13.00	15.00	2.326E 02	4.345E 01	1.787E 01	7.100E 00	9.507E 00
225	14.00	0.0	1.167E-01	2.046E-02	8.834E-03	3.419E-03	5.044E-03
226	14.00	1.00	3.303E-01	8.281E-02	2.879E-02	1.612E-02	1.717E-02
227	14.00	2.00	7.762E-01	2.573E-01	7.721E-02	5.410E-02	4.764E-02
228	14.00	3.00	2.691E 01	5.104E 00	1.980E 00	6.129E-01	5.596E-01
229	14.00	4.00	1.029E 02	1.933E 01	7.583E 00	2.084E 00	2.116E 00
230	14.00	5.00	8.798E 01	1.794E 01	6.757E 00	2.336E 00	2.335E 00
231	14.00	6.00	6.935E 01	1.580E 01	5.679E 00	2.642E 00	2.683E 00
232	14.00	7.00	4.975E 01	1.319E 01	4.486E 00	2.880E 00	3.012E 00
233	14.00	8.00	5.379E 01	1.421E 01	4.900E 00	3.337E 00	3.656E 00
234	14.00	9.00	5.915E 01	1.511E 01	5.326E 00	3.644E 00	4.140E 00
235	14.00	10.00	6.234E 01	1.549E 01	5.556E 00	3.762E 00	4.372E 00
236	14.00	11.00	9.396E 01	2.080E 01	7.893E 00	4.533E 00	5.554E 00
237	14.00	12.00	1.137E 02	2.350E 01	9.290E 00	4.882E 00	6.103E 00
238	14.00	13.00	2.148E 02	4.138E 01	1.656E 01	6.516E 00	8.191E 00
239	14.00	14.00	2.344E 02	4.452E 01	1.795E 01	6.934E 00	8.878E 00
240	14.00	15.00	1.916E 02	3.668E 01	1.475E 01	5.776E 00	7.324E 00
241	15.00	0.0	1.125E-02	1.974E-03	8.520E-04	3.295E-04	4.865E-04
242	15.00	1.00	2.965E-02	5.340E-03	2.267E-03	9.050E-04	1.298E-03
243	15.00	2.00	6.384E-02	1.366E-02	5.209E-03	2.507E-03	3.047E-03
244	15.00	3.00	3.019E 00	5.595E-01	2.203E-01	6.560E-02	6.216E-02
245	15.00	4.00	1.308E 02	2.254E 01	9.373E 00	2.065E 00	2.310E 00
246	15.00	5.00	1.335E 02	2.400E 01	9.667E 00	2.304E 00	2.505E 00
247	15.00	6.00	5.955E 01	1.205E 01	4.556E 00	1.527E 00	1.530E 00
248	15.00	7.00	3.945E 01	9.460E 00	3.309E 00	1.652E 00	1.630E 00
249	15.00	8.00	3.962E 01	1.019E 01	3.495E 00	2.057E 00	2.164E 00
250	15.00	9.00	4.512E 01	1.160E 01	4.023E 00	2.560E 00	2.764E 00
251	15.00	10.00	6.486E 01	1.519E 01	5.525E 00	3.200E 00	3.612E 00
252	15.00	11.00	1.381E 02	2.796E 01	1.081E 01	4.533E 00	5.251E 00
253	15.00	12.00	1.651E 02	3.275E 01	1.281E 01	5.057E 00	6.044E 00
254	15.00	13.00	1.859E 02	3.632E 01	1.434E 01	5.518E 00	6.661E 00
255	15.00	14.00	2.053E 02	3.956E 01	1.575E 01	5.908E 00	7.250E 00
256	15.00	15.00	1.900E 02	3.662E 01	1.455E 01	5.417E 00	6.697E 00
257	16.00	0.0	7.866E-04	1.380E-04	5.957E-05	2.306E-05	3.401E-05
258	16.00	1.00	2.284E-03	4.007E-04	1.730E-04	6.696E-05	9.878E-05
259	16.00	2.00	2.367E-02	4.058E-03	1.707E-03	5.002E-04	6.158E-04

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
260	16.00	3.00	1.227E-01	2.545E-02	9.570E-03	3.871E-03	3.988E-03
261	16.00	4.00	1.208E 02	2.093E 01	8.611E 00	1.850E 00	2.094E 00
262	16.00	5.00	1.458E 02	2.544E 01	1.042E 01	2.264E 00	2.566E 00
263	16.00	6.00	5.052E 01	9.375E 00	3.705E 00	9.520E-01	1.038E 00
264	16.00	7.00	3.298E 01	6.947E 00	2.572E 00	9.576E-01	9.444E-01
265	16.00	8.00	3.095E 01	7.248E 00	2.565E 00	1.236E 00	1.231E 00
266	16.00	9.00	2.464E 01	8.474E 00	2.967E 00	1.631E 00	1.688E 00
267	16.00	10.00	4.145E 01	1.011E 01	3.579E 00	2.078E 00	2.244E 00
268	16.00	11.00	4.775E 01	1.151E 01	4.125E 00	2.447E 00	2.730E 00
269	16.00	12.00	1.172E 02	2.385E 01	9.175E 00	3.735E 00	4.295E 00
270	16.00	13.00	1.520E 02	2.990E 01	1.170E 01	4.435E 00	5.161E 00
271	16.00	14.00	1.673E 02	3.259E 01	1.282E 01	4.727E 00	5.551E 00
272	16.00	15.00	1.231E 02	2.476E 01	9.640E 00	4.057E 00	4.816E 00
273	17.00	0.0	3.988E-05	6.955E-06	3.020E-06	1.165E-06	1.724E-06
274	17.00	1.00	1.186E-04	2.080E-05	8.978E-06	3.475E-06	5.126E-06
275	17.00	2.00	1.778E 01	3.080E 00	1.268E 00	2.670E-01	3.053E-01
276	17.00	3.00	3.593E 01	6.225E 00	2.563E 00	5.398E-01	6.173E-01
277	17.00	4.00	5.913E 01	1.025E 01	4.218E 00	8.907E-01	1.018E 00
278	17.00	5.00	6.897E 01	1.189E 01	4.906E 00	1.106E 00	1.220E 00
279	17.00	6.00	3.954E 01	6.967E 00	2.833E 00	7.046E-01	7.480E-01
280	17.00	7.00	2.573E 01	4.934E 00	1.917E 00	5.765E-01	5.861E-01
281	17.00	8.00	2.448E 01	5.157E 00	1.913E 00	7.253E-01	7.223E-01
282	17.00	9.00	2.688E 01	6.061E 00	2.186E 00	9.504E-01	1.001E 00
283	17.00	10.00	3.094E 01	7.237E 00	2.584E 00	1.217E 00	1.274E 00
284	17.00	11.00	3.589E 01	8.502E 00	3.040E 00	1.664E 00	1.788E 00
285	17.00	12.00	7.373E 01	1.546E 01	5.846E 00	2.485E 00	2.777E 00
286	17.00	13.00	9.277E 01	1.901E 01	7.281E 00	2.977E 00	3.391E 00
287	17.00	14.00	1.378E 02	2.675E 01	1.049E 01	3.818E 00	4.338E 00
288	17.00	15.00	1.009E 02	2.038E 01	7.886E 00	3.350E 00	3.846E 00
289	18.00	0.0	1.467E-06	2.573E-07	1.111E-07	4.300E-08	6.343E-08
290	18.00	1.00	1.095E-05	1.920E-06	8.295E-07	3.209E-07	4.733E-07
291	18.00	2.00	-3.110E-05	-4.833E-06	-1.252E-06	2.652E-06	5.125E-06
292	18.00	3.00	1.533E 01	2.602E 00	1.080E 00	2.544E-01	2.731E-01
293	18.00	4.00	1.723E 01	2.986E 00	1.229E 00	2.693E-01	2.964E-01
294	18.00	5.00	3.779E 01	6.369E 00	2.650E 00	6.592E-01	6.883E-01
295	18.00	6.00	3.578E 01	6.074E 00	2.516E 00	6.416E-01	6.646E-01
296	18.00	7.00	1.884E 01	3.399E 00	1.364E 00	3.668E-01	3.809E-01

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
297	18.00	8.00	1.837E 01	3.565E 00	1.377E 00	4.336E-01	4.401E-01
298	18.00	9.00	2.180E 01	4.475E 00	1.683E 00	6.329E-01	6.356E-01
299	18.00	10.00	2.575E 01	5.534E 00	2.044E 00	8.852E-01	9.042E-01
300	18.00	11.00	3.628E 01	7.750E 00	2.882E 00	1.244E 00	1.314E 00
301	18.00	12.00	5.501E 01	1.127E 01	4.284E 00	1.741E 00	1.872E 00
302	18.00	13.00	5.584E 01	1.182E 01	4.448E 00	1.944E 00	2.153E 00
303	18.00	14.00	1.123E 02	2.144E 01	8.446E 00	3.000E 00	3.285E 00
304	18.00	15.00	9.969E 01	1.941E 01	7.594E 00	2.595E 00	3.261E 00
305	19.00	0.0	0.0	0.0	0.0	0.0	0.0
306	19.00	1.00	5.234E-02	9.067E-03	3.733E-03	7.860E-04	8.587E-04
307	19.00	2.00	4.311E-01	7.469E-02	3.075E-02	6.474E-03	7.403E-03
308	19.00	3.00	9.521E 00	1.584E 00	6.625E-01	1.734E-01	1.760E-01
309	19.00	4.00	2.036E 01	3.388E 00	1.417E 00	3.697E-01	3.758E-01
310	19.00	5.00	2.593E 01	4.314E 00	1.804E 00	4.737E-01	4.803E-01
311	19.00	6.00	2.537E 01	4.291E 00	1.782E 00	4.395E-01	4.611E-01
312	19.00	7.00	1.407E 01	2.449E 00	1.002E 00	2.538E-01	2.668E-01
313	19.00	8.00	1.535E 01	2.776E 00	1.112E 00	3.076E-01	3.178E-01
314	19.00	9.00	1.568E 01	3.023E 00	1.173E 00	3.720E-01	3.757E-01
315	19.00	10.00	2.285E 01	4.494E 00	1.726E 00	6.554E-01	6.653E-01
316	19.00	11.00	2.689E 01	5.450E 00	2.076E 00	8.445E-01	8.712E-01
317	19.00	12.00	3.083E 01	6.485E 00	2.427E 00	1.054E 00	1.108E 00
318	19.00	13.00	7.164E 01	1.353E 01	5.333E 00	1.840E 00	1.937E 00
319	19.00	14.00	8.334E 01	1.573E 01	6.213E 00	2.179E 00	2.317E 00
320	19.00	15.00	6.820E 01	1.351E 01	5.234E 00	2.092E 00	2.279E 00
321	20.00	0.0	0.0	0.0	0.0	0.0	0.0
322	20.00	1.00	5.273E-03	9.135E-04	3.761E-04	7.918E-05	9.054E-05
323	20.00	2.00	2.773E-02	4.803E-03	1.978E-03	4.164E-04	4.762E-04
324	20.00	3.00	9.027E-02	1.564E-02	6.440E-03	1.356E-03	1.552E-03
325	20.00	4.00	8.037E 00	1.330E 00	5.577E-01	1.493E-01	1.498E-01
326	20.00	5.00	1.297E 01	2.150E 00	9.008E-01	2.402E-01	2.415E-01
327	20.00	6.00	5.546E 01	9.499E 00	3.928E 00	8.736E-01	9.635E-01
328	20.00	7.00	1.726E 01	2.963E 00	1.223E 00	2.841E-01	3.080E-01
329	20.00	8.00	2.511E 01	4.275E 00	1.766E 00	4.585E-01	4.724E-01
330	20.00	9.00	1.500E 01	2.692E 00	1.082E 00	2.991E-01	3.096E-01
331	20.00	10.00	2.244E 01	4.110E 00	1.634E 00	5.717E-01	5.814E-01
332	20.00	11.00	2.422E 01	4.613E 00	1.800E 00	6.763E-01	6.902E-01
333	20.00	12.00	2.621E 01	5.190E 00	1.992E 00	8.049E-01	8.259E-01

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
334	20.00	13.00	4.239E 01	8.101E 00	3.169E 00	1.124E 00	1.169E 00
335	20.00	14.00	5.349E 01	1.019E 01	4.000E 00	1.422E 00	1.454E 00
336	20.00	15.00	4.310E 01	8.754E 00	3.347E 00	1.394E 00	1.502E 00
337	21.00	0.0	0.0	0.0	0.0	0.0	0.0
338	21.00	1.00	-1.613E-08	-2.795E-09	-1.151E-09	-2.423E-10	-2.770E-10
339	21.00	2.00	3.184E-01	5.265E-02	2.208E-02	5.940E-03	5.942E-03
340	21.00	3.00	9.155E-01	1.514E-01	6.348E-02	1.707E-02	1.708E-02
341	21.00	4.00	1.990E 00	3.292E-01	1.380E-01	3.710E-02	3.714E-02
342	21.00	5.00	7.805E 01	1.339E 01	5.535E 00	1.212E 00	1.347E 00
343	21.00	6.00	9.425E 01	1.619E 01	6.685E 00	1.456E 00	1.622E 00
344	21.00	7.00	4.093E 01	6.856E 00	2.870E 00	7.042E-01	7.382E-01
345	21.00	8.00	4.141E 01	6.956E 00	2.896E 00	7.902E-01	8.085E-01
346	21.00	9.00	2.269E 01	3.902E 00	1.604E 00	4.929E-01	5.065E-01
347	21.00	10.00	2.205E 01	3.879E 00	1.575E 00	5.209E-01	5.323E-01
348	21.00	11.00	2.415E 01	4.351E 00	1.745E 00	6.064E-01	6.184E-01
349	21.00	12.00	2.706E 01	4.956E 00	1.980E 00	7.197E-01	7.352E-01
350	21.00	13.00	2.473E 01	4.776E 00	1.857E 00	6.743E-01	6.986E-01
351	21.00	14.00	3.001E 01	5.863E 00	2.271E 00	8.459E-01	8.855E-01
352	21.00	15.00	2.851E 01	5.851E 00	2.222E 00	9.310E-01	9.937E-01
353	22.00	0.0	-3.089E-11	-5.351E-12	-2.203E-12	-4.638E-13	-5.303E-13
354	22.00	1.00	3.727E-06	6.456E-07	2.658E-07	5.596E-08	6.398E-08
355	22.00	2.00	1.761E-05	3.072E-06	1.262E-06	2.569E-07	3.031E-07
356	22.00	3.00	1.086E-01	1.796E-02	7.533E-03	2.028E-03	2.028E-03
357	22.00	4.00	2.825E-01	4.672E-02	1.959E-02	5.271E-03	5.275E-03
358	22.00	5.00	2.605E 01	4.476E 00	1.849E 00	4.016E-01	4.482E-01
359	22.00	6.00	2.092E 01	3.592E 00	1.484E 00	3.235E-01	3.605E-01
360	22.00	7.00	2.020E 01	3.423E 00	1.422E 00	3.366E-01	3.594E-01
361	22.00	8.00	1.540E 01	2.612E 00	1.084E 00	2.611E-01	2.769E-01
362	22.00	9.00	1.768E 01	3.023E 00	1.247E 00	3.682E-01	3.819E-01
363	22.00	10.00	1.850E 01	3.200E 00	1.311E 00	4.121E-01	4.247E-01
364	22.00	11.00	2.030E 01	3.571E 00	1.450E 00	4.824E-01	4.946E-01
365	22.00	12.00	1.804E 01	3.281E 00	1.311E 00	4.252E-01	4.481E-01
366	22.00	13.00	1.745E 01	3.307E 00	1.297E 00	4.475E-01	4.640E-01
367	22.00	14.00	1.859E 01	3.655E 00	1.410E 00	5.257E-01	5.459E-01
368	22.00	15.00	2.079E 01	4.202E 00	1.604E 00	6.423E-01	6.795E-01
369	23.00	0.0	0.0	0.0	0.0	0.0	0.0
370	23.00	1.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM ENVIRON SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
371	23.00	2.00	-1.454E-07	-2.404E-08	-1.008E-08	-2.715E-09	-2.715E-09
372	23.00	3.00	7.243E-03	1.197E-03	5.022E-04	1.352E-04	1.352E-04
373	23.00	4.00	2.289E-02	3.786E-03	1.587E-03	4.270E-04	4.276E-04
374	23.00	5.00	2.504E 00	4.301E-01	1.777E-01	3.864E-02	4.310E-02
375	23.00	6.00	3.570E 00	6.129E-01	2.533E-01	5.537E-02	6.160E-02
376	23.00	7.00	5.527E 00	9.442E-01	3.905E-01	8.830E-02	9.661E-02
377	23.00	8.00	6.482E 00	1.107E 00	4.582E-01	1.053E-01	1.144E-01
378	23.00	9.00	1.027E 01	1.755E 00	7.246E-01	2.053E-01	2.153E-01
379	23.00	10.00	1.250E 01	2.145E 00	8.840E-01	2.626E-01	2.737E-01
380	23.00	11.00	1.480E 01	2.572E 00	1.052E 00	3.297E-01	3.408E-01
381	23.00	12.00	1.311E 01	2.338E 00	9.443E-01	2.850E-01	2.965E-01
382	23.00	13.00	1.351E 01	2.485E 00	9.887E-01	3.130E-01	3.259E-01
383	23.00	14.00	1.457E 01	2.770E 00	1.085E 00	3.710E-01	3.875E-01
384	23.00	15.00	1.624E 01	3.182E 00	1.230E 00	4.555E-01	4.790E-01
385	24.00	0.0	0.0	0.0	0.0	0.0	0.0
386	24.00	1.00	-3.898E-10	-6.444E-11	-2.702E-11	-7.276E-12	-7.276E-12
387	24.00	2.00	6.336E-05	1.048E-05	4.393E-06	1.183E-06	1.183E-06
388	24.00	3.00	2.722E-04	4.501E-05	1.888E-05	5.084E-06	5.088E-06
389	24.00	4.00	1.212E-02	2.078E-03	8.592E-04	1.894E-04	2.098E-04
390	24.00	5.00	6.229E-02	1.066E-02	4.412E-03	9.800E-04	1.082E-03
391	24.00	6.00	4.284E-01	7.343E-02	3.036E-02	6.702E-03	7.423E-03
392	24.00	7.00	1.470E 00	2.516E-01	1.039E-01	2.653E-02	2.858E-02
393	24.00	8.00	2.941E 00	5.031E-01	2.079E-01	5.470E-02	5.845E-02
394	24.00	9.00	4.794E 00	8.207E-01	3.388E-01	9.123E-02	9.688E-02
395	24.00	10.00	6.858E 00	1.178E 00	4.852E-01	1.353E-01	1.426E-01
396	24.00	11.00	8.956E 00	1.549E 00	6.355E-01	1.852E-01	1.937E-01
397	24.00	12.00	8.987E 00	1.582E 00	6.436E-01	1.796E-01	1.889E-01
398	24.00	13.00	1.005E 01	1.809E 00	7.280E-01	2.133E-01	2.236E-01
399	24.00	14.00	1.131E 01	2.089E 00	8.297E-01	2.614E-01	2.736E-01
400	24.00	15.00	1.273E 01	2.419E 00	9.485E-01	3.224E-01	3.393E-01

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	1.00	0.0	0.0	0.0	0.0	0.0
3	0.0	2.00	0.0	0.0	0.0	0.0	0.0
4	0.0	3.00	0.0	0.0	0.0	0.0	0.0
5	0.0	4.00	0.0	0.0	0.0	0.0	0.0
6	0.0	5.00	0.0	0.0	0.0	0.0	0.0
7	0.0	6.00	0.0	0.0	0.0	0.0	0.0
8	0.0	7.00	0.0	0.0	0.0	0.0	0.0
9	0.0	8.00	0.0	0.0	0.0	0.0	0.0
10	0.0	9.00	0.0	0.0	0.0	0.0	0.0
11	0.0	10.00	0.0	0.0	0.0	0.0	0.0
12	0.0	11.00	0.0	0.0	0.0	0.0	0.0
13	0.0	12.00	0.0	0.0	0.0	0.0	0.0
14	0.0	13.00	0.0	0.0	0.0	0.0	0.0
15	0.0	14.00	0.0	0.0	0.0	0.0	0.0
16	0.0	15.00	0.0	0.0	0.0	0.0	0.0
17	1.00	0.0	0.0	0.0	0.0	0.0	0.0
18	1.00	1.00	0.0	0.0	0.0	0.0	0.0
19	1.00	2.00	0.0	0.0	0.0	0.0	0.0
20	1.00	3.00	0.0	0.0	0.0	0.0	0.0
21	1.00	4.00	0.0	0.0	0.0	0.0	0.0
22	1.00	5.00	0.0	0.0	0.0	0.0	0.0
23	1.00	6.00	0.0	0.0	0.0	0.0	0.0
24	1.00	7.00	0.0	0.0	0.0	0.0	0.0
25	1.00	8.00	0.0	0.0	0.0	0.0	0.0
26	1.00	9.00	0.0	0.0	0.0	0.0	0.0
27	1.00	10.00	0.0	0.0	0.0	0.0	0.0
28	1.00	11.00	0.0	0.0	0.0	0.0	0.0
29	1.00	12.00	0.0	0.0	0.0	0.0	0.0
30	1.00	13.00	0.0	0.0	0.0	0.0	0.0
31	1.00	14.00	0.0	0.0	0.0	0.0	0.0
32	1.00	15.00	0.0	0.0	0.0	0.0	0.0
33	2.00	0.0	0.0	0.0	0.0	0.0	0.0
34	2.00	1.00	0.0	0.0	0.0	0.0	0.0
35	2.00	2.00	0.0	0.0	0.0	0.0	0.0
36	2.00	3.00	0.0	0.0	0.0	0.0	0.0
37	2.00	4.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
38	2.00	5.00	0.0	0.0	0.0	0.0	0.0
39	2.00	6.00	0.0	0.0	0.0	0.0	0.0
40	2.00	7.00	0.0	0.0	0.0	0.0	0.0
41	2.00	8.00	0.0	0.0	0.0	0.0	0.0
42	2.00	9.00	0.0	0.0	0.0	0.0	0.0
43	2.00	10.00	0.0	0.0	0.0	0.0	0.0
44	2.00	11.00	0.0	0.0	0.0	0.0	0.0
45	2.00	12.00	0.0	0.0	0.0	0.0	0.0
46	2.00	13.00	0.0	0.0	0.0	0.0	0.0
47	2.00	14.00	0.0	0.0	0.0	0.0	0.0
48	2.00	15.00	0.0	0.0	0.0	0.0	0.0
49	3.00	0.0	0.0	0.0	0.0	0.0	0.0
50	3.00	1.00	0.0	0.0	0.0	0.0	0.0
51	3.00	2.00	0.0	0.0	0.0	0.0	0.0
52	3.00	3.00	0.0	0.0	0.0	0.0	0.0
53	3.00	4.00	0.0	0.0	0.0	0.0	0.0
54	3.00	5.00	0.0	0.0	0.0	0.0	0.0
55	3.00	6.00	0.0	0.0	0.0	0.0	0.0
56	3.00	7.00	0.0	0.0	0.0	0.0	0.0
57	3.00	8.00	0.0	0.0	0.0	0.0	0.0
58	3.00	9.00	0.0	0.0	0.0	0.0	0.0
59	3.00	10.00	0.0	0.0	0.0	0.0	0.0
60	3.00	11.00	0.0	0.0	0.0	0.0	0.0
61	3.00	12.00	0.0	0.0	0.0	0.0	0.0
62	3.00	13.00	0.0	0.0	0.0	0.0	0.0
63	3.00	14.00	0.0	0.0	0.0	0.0	0.0
64	3.00	15.00	0.0	0.0	0.0	0.0	0.0
65	4.00	0.0	0.0	0.0	0.0	0.0	0.0
66	4.00	1.00	0.0	0.0	0.0	0.0	0.0
67	4.00	2.00	0.0	0.0	0.0	0.0	0.0
68	4.00	3.00	0.0	0.0	0.0	0.0	0.0
69	4.00	4.00	0.0	0.0	0.0	0.0	0.0
70	4.00	5.00	0.0	0.0	0.0	0.0	0.0
71	4.00	6.00	0.0	0.0	0.0	0.0	0.0
72	4.00	7.00	0.0	0.0	0.0	0.0	0.0
73	4.00	8.00	0.0	0.0	0.0	0.0	0.0
74	4.00	9.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
75	4.00	10.00	0.0	0.0	0.0	0.0	0.0
76	4.00	11.00	0.0	0.0	0.0	0.0	0.0
77	4.00	12.00	0.0	0.0	0.0	0.0	0.0
78	4.00	13.00	0.0	0.0	0.0	0.0	0.0
79	4.00	14.00	0.0	0.0	0.0	0.0	0.0
80	4.00	15.00	0.0	0.0	0.0	0.0	0.0
81	5.00	0.0	0.0	0.0	0.0	0.0	0.0
82	5.00	1.00	0.0	0.0	0.0	0.0	0.0
83	5.00	2.00	0.0	0.0	0.0	0.0	0.0
84	5.00	3.00	0.0	0.0	0.0	0.0	0.0
85	5.00	4.00	0.0	0.0	0.0	0.0	0.0
86	5.00	5.00	0.0	0.0	0.0	0.0	0.0
87	5.00	6.00	0.0	0.0	0.0	0.0	0.0
88	5.00	7.00	0.0	0.0	0.0	0.0	0.0
89	5.00	8.00	0.0	0.0	0.0	0.0	0.0
90	5.00	9.00	0.0	0.0	0.0	0.0	0.0
91	5.00	10.00	0.0	0.0	0.0	0.0	0.0
92	5.00	11.00	0.0	0.0	0.0	0.0	0.0
93	5.00	12.00	0.0	0.0	0.0	0.0	0.0
94	5.00	13.00	0.0	0.0	0.0	0.0	0.0
95	5.00	14.00	0.0	0.0	0.0	0.0	0.0
96	5.00	15.00	0.0	0.0	0.0	0.0	0.0
97	6.00	0.0	0.0	0.0	0.0	0.0	0.0
98	6.00	1.00	0.0	0.0	0.0	0.0	0.0
99	6.00	2.00	0.0	0.0	0.0	0.0	0.0
100	6.00	3.00	0.0	0.0	0.0	0.0	0.0
101	6.00	4.00	0.0	0.0	0.0	0.0	0.0
102	6.00	5.00	0.0	0.0	0.0	0.0	0.0
103	6.00	6.00	0.0	0.0	0.0	0.0	0.0
104	6.00	7.00	0.0	0.0	0.0	0.0	0.0
105	6.00	8.00	0.0	0.0	0.0	0.0	0.0
106	6.00	9.00	0.0	0.0	0.0	0.0	0.0
107	6.00	10.00	0.0	0.0	0.0	0.0	0.0
108	6.00	11.00	0.0	0.0	0.0	0.0	0.0
109	6.00	12.00	0.0	0.0	0.0	0.0	0.0
110	6.00	13.00	0.0	0.0	0.0	0.0	0.0
111	6.00	14.00	0.0	0.0	0.0	0.0	0.0

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MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
112	6.00	15.00	5.691E-10	3.423E-10	5.713E-10	1.332E-11	2.049E-11
113	7.00	0.0	0.0	0.0	0.0	0.0	0.0
114	7.00	1.00	0.0	0.0	0.0	0.0	0.0
115	7.00	2.00	0.0	0.0	0.0	0.0	0.0
116	7.00	3.00	0.0	0.0	0.0	0.0	0.0
117	7.00	4.00	0.0	0.0	0.0	0.0	0.0
118	7.00	5.00	0.0	0.0	0.0	0.0	0.0
119	7.00	6.00	0.0	0.0	0.0	0.0	0.0
120	7.00	7.00	0.0	0.0	0.0	0.0	0.0
121	7.00	8.00	0.0	0.0	0.0	0.0	0.0
122	7.00	9.00	0.0	0.0	0.0	0.0	0.0
123	7.00	10.00	0.0	0.0	0.0	0.0	0.0
124	7.00	11.00	-9.762E-14	-1.347E-14	-1.354E-13	-2.717E-15	-4.787E-15
125	7.00	12.00	0.0	0.0	0.0	0.0	0.0
126	7.00	13.00	5.800E-10	8.004E-11	8.046E-10	1.614E-11	2.844E-11
127	7.00	14.00	1.940E-08	1.373E-08	1.781E-08	4.347E-10	6.421E-10
128	7.00	15.00	2.032E-07	2.109E-07	1.319E-07	3.521E-09	4.868E-09
129	8.00	0.0	0.0	0.0	0.0	0.0	0.0
130	8.00	1.00	0.0	0.0	0.0	0.0	0.0
131	8.00	2.00	0.0	0.0	0.0	0.0	0.0
132	8.00	3.00	0.0	0.0	0.0	0.0	0.0
133	8.00	4.00	0.0	0.0	0.0	0.0	0.0
134	8.00	5.00	0.0	0.0	0.0	0.0	0.0
135	8.00	6.00	0.0	0.0	0.0	0.0	0.0
136	8.00	7.00	0.0	0.0	0.0	0.0	0.0
137	8.00	8.00	0.0	0.0	0.0	0.0	0.0
138	8.00	9.00	0.0	0.0	0.0	0.0	0.0
139	8.00	10.00	3.520E-06	4.857E-07	4.883E-06	9.794E-08	1.726E-07
140	8.00	11.00	7.717E-07	1.065E-07	1.071E-06	2.148E-08	3.784E-08
141	8.00	12.00	1.096E-07	3.156E-08	1.384E-07	2.852E-09	4.911E-09
142	8.00	13.00	1.019E-06	8.937E-07	7.960E-07	2.121E-08	2.856E-08
143	8.00	14.00	5.455E-06	6.312E-06	3.031E-06	9.538E-08	1.132E-07
144	8.00	15.00	2.761E-05	2.248E-05	7.904E-06	3.025E-07	3.017E-07
145	9.00	0.0	0.0	0.0	0.0	0.0	0.0
146	9.00	1.00	0.0	0.0	0.0	0.0	0.0
147	9.00	2.00	0.0	0.0	0.0	0.0	0.0
148	9.00	3.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
149	9.00	4.00	0.0	0.0	0.0	0.0	0.0
150	9.00	5.00	0.0	0.0	0.0	0.0	0.0
151	9.00	6.00	0.0	0.0	0.0	0.0	0.0
152	9.00	7.00	0.0	0.0	0.0	0.0	0.0
153	9.00	8.00	0.0	0.0	0.0	0.0	0.0
154	9.00	9.00	0.0	0.0	0.0	0.0	0.0
155	9.00	10.00	-3.706E-08	-5.114E-09	-5.141E-08	-1.031E-09	-1.817E-09
156	9.00	11.00	1.303E-04	2.716E-05	1.732E-04	3.541E-06	6.137E-06
157	9.00	12.00	2.677E-04	9.321E-05	5.363E-05	1.725E-06	1.987E-06
158	9.00	13.00	3.289E-04	2.292E-04	8.462E-05	3.169E-06	3.219E-06
159	9.00	14.00	4.574E-04	4.279E-04	1.162E-04	5.042E-06	4.530E-06
160	9.00	15.00	6.363E-04	7.126E-04	1.633E-04	7.837E-06	6.459E-06
161	10.00	0.0	0.0	0.0	0.0	0.0	0.0
162	10.00	1.00	0.0	0.0	0.0	0.0	0.0
163	10.00	2.00	0.0	0.0	0.0	0.0	0.0
164	10.00	3.00	0.0	0.0	0.0	0.0	0.0
165	10.00	4.00	0.0	0.0	0.0	0.0	0.0
166	10.00	5.00	0.0	0.0	0.0	0.0	0.0
167	10.00	6.00	0.0	0.0	0.0	0.0	0.0
168	10.00	7.00	0.0	0.0	0.0	0.0	0.0
169	10.00	8.00	0.0	0.0	0.0	0.0	0.0
170	10.00	9.00	-6.519E-06	-9.377E-06	-4.718E-07	-8.234E-08	-2.839E-08
171	10.00	10.00	4.015E-02	1.648E-02	6.891E-04	1.336E-04	4.109E-05
172	10.00	11.00	1.869E-02	1.186E-02	8.182E-03	2.385E-04	3.006E-04
173	10.00	12.00	9.082E-03	9.178E-03	2.520E-03	1.083E-04	9.815E-05
174	10.00	13.00	7.154E-03	8.704E-03	1.796E-03	8.525E-05	7.182E-05
175	10.00	14.00	6.704E-03	9.063E-03	1.514E-03	9.627E-05	6.180E-05
176	10.00	15.00	6.809E-03	9.764E-03	1.510E-03	1.825E-04	6.086E-05
177	11.00	0.0	0.0	0.0	0.0	0.0	0.0
178	11.00	1.00	0.0	0.0	0.0	0.0	0.0
179	11.00	2.00	0.0	0.0	0.0	0.0	0.0
180	11.00	3.00	0.0	0.0	0.0	0.0	0.0
181	11.00	4.00	0.0	0.0	0.0	0.0	0.0
182	11.00	5.00	0.0	0.0	0.0	0.0	0.0
183	11.00	6.00	0.0	0.0	0.0	0.0	0.0
184	11.00	7.00	0.0	0.0	0.0	0.0	0.0
185	11.00	8.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
186	11.00	9.00	1.105E-01	-2.618E-04	2.853E-04	2.470E-04	1.318E-05
187	11.00	10.00	4.926E-01	9.886E-01	1.763E-01	7.027E-03	6.766E-03
188	11.00	11.00	3.341E-01	6.240E-01	8.130E-02	4.644E-03	3.350E-03
189	11.00	12.00	1.266E-01	2.046E-01	2.476E-02	1.577E-03	1.058E-03
190	11.00	13.00	6.942E-02	1.112E-01	1.352E-02	2.686E-03	5.480E-04
191	11.00	14.00	5.086E-02	7.776E-02	1.101E-02	4.867E-03	3.767E-04
192	11.00	15.00	4.400E-02	6.268E-02	1.106E-02	7.448E-03	3.058E-04
193	12.00	0.0	0.0	0.0	0.0	0.0	0.0
194	12.00	1.00	0.0	0.0	0.0	0.0	0.0
195	12.00	2.00	0.0	0.0	0.0	0.0	0.0
196	12.00	3.00	0.0	0.0	0.0	0.0	0.0
197	12.00	4.00	0.0	0.0	0.0	0.0	0.0
198	12.00	5.00	0.0	0.0	0.0	0.0	0.0
199	12.00	6.00	0.0	0.0	0.0	0.0	0.0
200	12.00	7.00	0.0	0.0	0.0	0.0	0.0
201	12.00	8.00	0.0	0.0	0.0	0.0	0.0
202	12.00	9.00	2.335E-01	3.883E-01	1.688E-02	2.545E-03	1.016E-03
203	12.00	10.00	1.396E 00	8.668E 00	6.594E-01	5.817E-01	1.713E-02
204	12.00	11.00	1.605E 00	1.922E 00	4.945E-01	4.512E-01	8.264E-03
205	12.00	12.00	6.688E-01	7.942E-01	2.063E-01	2.224E-01	3.222E-03
206	12.00	13.00	3.772E-01	3.982E-01	1.340E-01	1.553E-01	1.706E-03
207	12.00	14.00	2.665E-01	2.630E-01	1.031E-01	1.231E-01	1.143E-03
208	12.00	15.00	2.104E-01	1.966E-01	8.567E-02	1.043E-01	8.737E-04
209	13.00	0.0	0.0	0.0	0.0	0.0	0.0
210	13.00	1.00	0.0	0.0	0.0	0.0	0.0
211	13.00	2.00	0.0	0.0	0.0	0.0	0.0
212	13.00	3.00	0.0	0.0	0.0	0.0	0.0
213	13.00	4.00	0.0	0.0	0.0	0.0	0.0
214	13.00	5.00	0.0	0.0	0.0	0.0	0.0
215	13.00	6.00	0.0	0.0	0.0	0.0	0.0
216	13.00	7.00	0.0	0.0	0.0	0.0	0.0
217	13.00	8.00	9.207E-07	1.532E-06	6.663E-08	1.163E-08	4.010E-09
218	13.00	9.00	4.818E-04	8.055E-04	2.822E-05	7.108E-06	1.837E-06
219	13.00	10.00	3.936E 00	9.487E-01	2.555E 00	3.359E 00	1.012E-02
220	13.00	11.00	4.167E 00	1.029E 00	2.636E 00	3.703E 00	5.921E-03
221	13.00	12.00	1.915E 00	6.950E-01	1.133E 00	1.582E 00	3.544E-03
222	13.00	13.00	1.207E 00	5.341E-01	6.843E-01	9.416E-01	2.410E-03

NAS NIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
223	13.00	14.00	8.405E-01	4.235E-01	4.605E-01	6.272E-01	1.852E-03
224	13.00	15.00	6.256E-01	3.431E-01	3.341E-01	4.513E-01	1.506E-03
225	14.00	0.0	0.0	0.0	0.0	0.0	0.0
226	14.00	1.00	0.0	0.0	0.0	0.0	0.0
227	14.00	2.00	0.0	0.0	0.0	0.0	0.0
228	14.00	3.00	0.0	0.0	0.0	0.0	0.0
229	14.00	4.00	0.0	0.0	0.0	0.0	0.0
230	14.00	5.00	0.0	0.0	0.0	0.0	0.0
231	14.00	6.00	0.0	0.0	0.0	0.0	0.0
232	14.00	7.00	0.0	0.0	0.0	0.0	0.0
233	14.00	8.00	-1.950E-07	-2.691E-08	-2.705E-07	-5.425E-09	-9.560E-09
234	14.00	9.00	9.071E-03	1.253E-03	1.258E-02	2.524E-04	4.447E-04
235	14.00	10.00	2.155E-02	5.950E-03	2.475E-02	4.576E-03	7.750E-04
236	14.00	11.00	3.256E-01	9.103E-02	2.180E-01	2.920E-01	1.175E-02
237	14.00	12.00	9.887E-01	2.525E-01	6.375E-01	8.945E-01	1.596E-02
238	14.00	13.00	1.201E 00	3.468E-01	7.538E-01	1.052E 00	1.757E-02
239	14.00	14.00	1.125E 00	3.783E-01	6.855E-01	9.512E-01	1.768E-02
240	14.00	15.00	9.627E-01	3.678E-01	5.706E-01	7.873E-01	1.668E-02
241	15.00	0.0	0.0	0.0	0.0	0.0	0.0
242	15.00	1.00	0.0	0.0	0.0	0.0	0.0
243	15.00	2.00	0.0	0.0	0.0	0.0	0.0
244	15.00	3.00	0.0	0.0	0.0	0.0	0.0
245	15.00	4.00	0.0	0.0	0.0	0.0	0.0
246	15.00	5.00	0.0	0.0	0.0	0.0	0.0
247	15.00	6.00	0.0	0.0	0.0	0.0	0.0
248	15.00	7.00	0.0	0.0	0.0	0.0	0.0
249	15.00	8.00	-3.618E-09	-4.993E-10	-5.015E-09	-1.007E-10	-1.774E-10
250	15.00	9.00	2.758E-04	3.862E-05	3.882E-04	7.787E-06	1.372E-05
251	15.00	10.00	1.140E-03	2.066E-04	1.538E-03	3.313E-05	5.436E-05
252	15.00	11.00	1.109E-02	4.330E-03	9.135E-03	6.515E-03	1.859E-04
253	15.00	12.00	1.420E-01	3.966E-02	9.433E-02	1.272E-01	4.255E-04
254	15.00	13.00	4.414E-01	1.184E-01	2.853E-01	3.967E-01	7.780E-04
255	15.00	14.00	6.981E-01	2.020E-01	4.410E-01	6.141E-01	1.094E-03
256	15.00	15.00	8.107E-01	2.589E-01	5.011E-01	6.955E-01	1.280E-03
257	16.00	0.0	0.0	0.0	0.0	0.0	0.0
258	16.00	1.00	0.0	0.0	0.0	0.0	0.0
259	16.00	2.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
260	16.00	3.00	0.0	0.0	0.0	0.0	0.0
261	16.00	4.00	0.0	0.0	0.0	0.0	0.0
262	16.00	5.00	0.0	0.0	0.0	0.0	0.0
263	16.00	6.00	0.0	0.0	0.0	0.0	0.0
264	16.00	7.00	1.173E-08	1.619E-09	1.626E-08	3.266E-10	5.754E-10
265	16.00	8.00	2.683E-07	3.703E-08	3.722E-07	7.466E-09	1.316E-08
266	16.00	9.00	2.394E-06	3.303E-07	3.320E-06	6.661E-08	1.174E-07
267	16.00	10.00	6.786E-05	1.015E-05	9.346E-05	1.882E-06	3.304E-06
268	16.00	11.00	6.948E-04	2.530E-04	7.891E-04	9.478E-05	2.642E-05
269	16.00	12.00	1.130E-02	4.245E-03	8.004E-03	8.631E-03	9.631E-05
270	16.00	13.00	8.505E-02	2.560E-02	5.568E-02	7.513E-02	2.565E-04
271	16.00	14.00	2.460E-01	7.176E-02	1.575E-01	2.182E-01	4.971E-04
272	16.00	15.00	4.237E-01	1.285E-01	2.667E-01	3.703E-01	7.386E-04
273	17.00	0.0	0.0	0.0	0.0	0.0	0.0
274	17.00	1.00	0.0	0.0	0.0	0.0	0.0
275	17.00	2.00	0.0	0.0	0.0	0.0	0.0
276	17.00	3.00	0.0	0.0	0.0	0.0	0.0
277	17.00	4.00	0.0	0.0	0.0	0.0	0.0
278	17.00	5.00	0.0	0.0	0.0	0.0	0.0
279	17.00	6.00	0.0	0.0	0.0	0.0	0.0
280	17.00	7.00	0.0	0.0	0.0	0.0	0.0
281	17.00	8.00	0.0	0.0	0.0	0.0	0.0
282	17.00	9.00	1.832E-08	2.528E-09	2.541E-08	5.098E-10	8.983E-10
283	17.00	10.00	3.706E-06	5.251E-07	5.129E-06	1.030E-07	1.813E-07
284	17.00	11.00	7.116E-05	1.829E-05	9.113E-05	2.769E-06	3.213E-06
285	17.00	12.00	9.169E-04	4.330E-04	7.886E-04	4.102E-04	1.959E-05
286	17.00	13.00	1.146E-02	4.330E-03	7.724E-03	9.228E-03	7.317E-05
287	17.00	14.00	5.887E-02	1.916E-02	3.796E-02	5.115E-02	1.849E-04
288	17.00	15.00	1.549E-01	4.867E-02	9.815E-02	1.354E-01	3.464E-04
289	18.00	0.0	0.0	0.0	0.0	0.0	0.0
290	18.00	1.00	0.0	0.0	0.0	0.0	0.0
291	18.00	2.00	0.0	0.0	0.0	0.0	0.0
292	18.00	3.00	0.0	0.0	0.0	0.0	0.0
293	18.00	4.00	0.0	0.0	0.0	0.0	0.0
294	18.00	5.00	0.0	0.0	0.0	0.0	0.0
295	18.00	6.00	0.0	0.0	0.0	0.0	0.0
296	18.00	7.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
297	18.00	8.00	0.0	0.0	0.0	0.0	0.0
298	18.00	9.00	3.478E-10	4.795E-11	4.825E-10	9.678E-12	1.705E-11
299	18.00	10.00	1.978E-07	2.757E-08	2.741E-07	5.501E-09	9.650E-09
300	18.00	11.00	7.664E-06	1.512E-06	1.024E-05	2.204E-07	3.622E-07
301	18.00	12.00	1.073E-04	4.695E-05	1.144E-04	1.806E-05	2.783E-06
302	18.00	13.00	1.393E-03	6.652E-04	1.032E-02	8.765E-04	1.896E-05
303	18.00	14.00	1.108E-02	4.294E-03	7.254E-03	9.051E-03	6.067E-05
304	18.00	15.00	4.378E-02	1.516E-02	2.785E-02	3.757E-02	1.404E-04
305	19.00	0.0	0.0	0.0	0.0	0.0	0.0
306	19.00	1.00	0.0	0.0	0.0	0.0	0.0
307	19.00	2.00	0.0	0.0	0.0	0.0	0.0
308	19.00	3.00	0.0	0.0	0.0	0.0	0.0
309	19.00	4.00	0.0	0.0	0.0	0.0	0.0
310	19.00	5.00	0.0	0.0	0.0	0.0	0.0
311	19.00	6.00	0.0	0.0	0.0	0.0	0.0
312	19.00	7.00	0.0	0.0	0.0	0.0	0.0
313	19.00	8.00	0.0	0.0	0.0	0.0	0.0
314	19.00	9.00	0.0	0.0	0.0	0.0	0.0
315	19.00	10.00	1.083E-08	1.494E-09	1.502E-08	3.013E-10	5.310E-10
316	19.00	11.00	8.137E-07	1.372E-07	1.107E-06	2.249E-08	3.917E-08
317	19.00	12.00	1.564E-05	5.370E-06	1.873E-05	1.011E-06	6.555E-07
318	19.00	13.00	1.904E-04	1.002E-04	1.648E-04	7.397E-05	4.546E-06
319	19.00	14.00	1.857E-03	8.756E-04	1.279E-03	1.328E-03	1.828E-05
320	19.00	15.00	1.040E-02	4.140E-03	6.669E-03	8.527E-03	5.136E-05
321	20.00	0.0	0.0	0.0	0.0	0.0	0.0
322	20.00	1.00	0.0	0.0	0.0	0.0	0.0
323	20.00	2.00	0.0	0.0	0.0	0.0	0.0
324	20.00	3.00	0.0	0.0	0.0	0.0	0.0
325	20.00	4.00	0.0	0.0	0.0	0.0	0.0
326	20.00	5.00	0.0	0.0	0.0	0.0	0.0
327	20.00	6.00	0.0	0.0	0.0	0.0	0.0
328	20.00	7.00	0.0	0.0	0.0	0.0	0.0
329	20.00	8.00	0.0	0.0	0.0	0.0	0.0
330	20.00	9.00	0.0	0.0	0.0	0.0	0.0
331	20.00	10.00	6.292E-10	8.683E-11	8.729E-10	1.751E-11	3.085E-11
332	20.00	11.00	8.587E-08	1.331E-08	1.179E-07	2.391E-09	4.166E-09
333	20.00	12.00	2.359E-06	6.475E-07	3.051E-06	8.553E-08	1.078E-07

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
334	20.00	13.00	3.083E-05	1.520E-05	3.111E-05	6.135E-06	1.020E-06
335	20.00	14.00	3.150E-04	1.710E-04	2.369E-04	1.742E-04	5.162E-06
336	20.00	15.00	2.236E-03	1.041E-03	1.468E-03	1.679E-03	1.745E-05
337	21.00	0.0	0.0	0.0	0.0	0.0	0.0
338	21.00	1.00	0.0	0.0	0.0	0.0	0.0
339	21.00	2.00	0.0	0.0	0.0	0.0	0.0
340	21.00	3.00	0.0	0.0	0.0	0.0	0.0
341	21.00	4.00	0.0	0.0	0.0	0.0	0.0
342	21.00	5.00	0.0	0.0	0.0	0.0	0.0
343	21.00	6.00	0.0	0.0	0.0	0.0	0.0
344	21.00	7.00	0.0	0.0	0.0	0.0	0.0
345	21.00	8.00	0.0	0.0	0.0	0.0	0.0
346	21.00	9.00	0.0	0.0	0.0	0.0	0.0
347	21.00	10.00	0.0	0.0	0.0	0.0	0.0
348	21.00	11.00	8.977E-09	1.239E-09	1.245E-08	2.498E-10	4.402E-10
349	21.00	12.00	3.655E-07	8.182E-08	4.802E-07	1.069E-08	1.700E-08
350	21.00	13.00	5.585E-06	2.341E-06	6.269E-06	5.585E-07	2.170E-07
351	21.00	14.00	5.728E-05	3.282E-05	4.896E-05	2.166E-05	1.382E-06
352	21.00	15.00	4.625E-04	2.490E-04	3.208E-04	3.004E-04	5.605E-06
353	22.00	0.0	0.0	0.0	0.0	0.0	0.0
354	22.00	1.00	0.0	0.0	0.0	0.0	0.0
355	22.00	2.00	0.0	0.0	0.0	0.0	0.0
356	22.00	3.00	0.0	0.0	0.0	0.0	0.0
357	22.00	4.00	0.0	0.0	0.0	0.0	0.0
358	22.00	5.00	0.0	0.0	0.0	0.0	0.0
359	22.00	6.00	0.0	0.0	0.0	0.0	0.0
360	22.00	7.00	0.0	0.0	0.0	0.0	0.0
361	22.00	8.00	0.0	0.0	0.0	0.0	0.0
362	22.00	9.00	0.0	0.0	0.0	0.0	0.0
363	22.00	10.00	0.0	0.0	0.0	0.0	0.0
364	22.00	11.00	9.851E-10	1.355E-10	1.367E-09	2.741E-11	4.830E-11
365	22.00	12.00	5.532E-08	1.076E-08	7.405E-08	1.525E-09	2.620E-09
366	22.00	13.00	1.052E-06	3.683E-07	1.261E-06	6.087E-08	4.438E-08
367	22.00	14.00	1.149E-05	6.281E-06	1.100E-05	2.682E-06	3.544E-07
368	22.00	15.00	9.812E-05	5.798E-05	7.348E-05	5.068E-05	1.720E-06
369	23.00	0.0	0.0	0.0	0.0	0.0	0.0
370	23.00	1.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRPORT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
371	23.00	2.00	0.0	0.0	0.0	0.0	0.0
372	23.00	3.00	0.0	0.0	0.0	0.0	0.0
373	23.00	4.00	0.0	0.0	0.0	0.0	0.0
374	23.00	5.00	0.0	0.0	0.0	0.0	0.0
375	23.00	6.00	0.0	0.0	0.0	0.0	0.0
376	23.00	7.00	0.0	0.0	0.0	0.0	0.0
377	23.00	8.00	0.0	0.0	0.0	0.0	0.0
378	23.00	9.00	0.0	0.0	0.0	0.0	0.0
379	23.00	10.00	0.0	0.0	0.0	0.0	0.0
380	23.00	11.00	1.109E-10	1.530E-11	1.538E-10	3.065E-12	5.426E-12
381	23.00	12.00	8.351E-09	1.452E-09	1.133E-08	2.254E-10	4.007E-10
382	23.00	13.00	1.998E-07	5.933E-08	2.498E-07	7.563E-09	8.823E-09
383	23.00	14.00	2.453E-06	1.207E-06	2.574E-06	3.462E-07	8.780E-08
384	23.00	15.00	2.170E-05	1.331E-05	1.795E-05	8.219E-06	5.086E-07
385	24.00	0.0	0.0	0.0	0.0	0.0	0.0
386	24.00	1.00	0.0	0.0	0.0	0.0	0.0
387	24.00	2.00	0.0	0.0	0.0	0.0	0.0
388	24.00	3.00	0.0	0.0	0.0	0.0	0.0
389	24.00	4.00	0.0	0.0	0.0	0.0	0.0
390	24.00	5.00	0.0	0.0	0.0	0.0	0.0
391	24.00	6.00	0.0	0.0	0.0	0.0	0.0
392	24.00	7.00	0.0	0.0	0.0	0.0	0.0
393	24.00	8.00	0.0	0.0	0.0	0.0	0.0
394	24.00	9.00	0.0	0.0	0.0	0.0	0.0
395	24.00	10.00	0.0	0.0	0.0	0.0	0.0
396	24.00	11.00	0.0	0.0	0.0	0.0	0.0
397	24.00	12.00	1.253E-09	1.729E-10	1.736E-09	3.486E-11	6.143E-11
398	24.00	13.00	3.802E-08	9.784E-09	4.890E-08	1.207E-09	1.733E-09
399	24.00	14.00	5.413E-07	2.340E-07	6.069E-07	4.834E-08	2.120E-08
400	24.00	15.00	5.089E-06	3.038E-06	4.614E-06	1.363E-06	1.459E-07

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	1.00	0.0	0.0	0.0	0.0	0.0
3	0.0	2.00	0.0	0.0	0.0	0.0	0.0
4	0.0	3.00	0.0	0.0	0.0	0.0	0.0
5	0.0	4.00	0.0	0.0	0.0	0.0	0.0
6	0.0	5.00	0.0	0.0	0.0	0.0	0.0
7	0.0	6.00	0.0	0.0	0.0	0.0	0.0
8	0.0	7.00	0.0	0.0	0.0	0.0	0.0
9	0.0	8.00	0.0	0.0	0.0	0.0	0.0
10	0.0	9.00	0.0	0.0	0.0	0.0	0.0
11	0.0	10.00	0.0	0.0	0.0	0.0	0.0
12	0.0	11.00	0.0	0.0	0.0	0.0	0.0
13	0.0	12.00	0.0	0.0	0.0	0.0	0.0
14	0.0	13.00	0.0	0.0	0.0	0.0	0.0
15	0.0	14.00	0.0	0.0	0.0	0.0	0.0
16	0.0	15.00	0.0	0.0	0.0	0.0	0.0
17	1.00	0.0	0.0	0.0	0.0	0.0	0.0
18	1.00	1.00	0.0	0.0	0.0	0.0	0.0
19	1.00	2.00	0.0	0.0	0.0	0.0	0.0
20	1.00	3.00	0.0	0.0	0.0	0.0	0.0
21	1.00	4.00	0.0	0.0	0.0	0.0	0.0
22	1.00	5.00	0.0	0.0	0.0	0.0	0.0
23	1.00	6.00	0.0	0.0	0.0	0.0	0.0
24	1.00	7.00	0.0	0.0	0.0	0.0	0.0
25	1.00	8.00	0.0	0.0	0.0	0.0	0.0
26	1.00	9.00	0.0	0.0	0.0	0.0	0.0
27	1.00	10.00	0.0	0.0	0.0	0.0	0.0
28	1.00	11.00	0.0	0.0	0.0	0.0	0.0
29	1.00	12.00	0.0	0.0	0.0	0.0	0.0
30	1.00	13.00	0.0	0.0	0.0	0.0	0.0
31	1.00	14.00	0.0	0.0	0.0	0.0	0.0
32	1.00	15.00	0.0	0.0	0.0	0.0	0.0
33	2.00	0.0	0.0	0.0	0.0	0.0	0.0
34	2.00	1.00	0.0	0.0	0.0	0.0	0.0
35	2.00	2.00	0.0	0.0	0.0	0.0	0.0
36	2.00	3.00	0.0	0.0	0.0	0.0	0.0
37	2.00	4.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES								
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS)		EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER)				
	X	Y	CO	HC	NOX	PT	SO2
38	2.00	5.00	0.0	0.0	0.0	0.0	0.0
39	2.00	6.00	0.0	0.0	0.0	0.0	0.0
40	2.00	7.00	0.0	0.0	0.0	0.0	0.0
41	2.00	8.00	0.0	0.0	0.0	0.0	0.0
42	2.00	9.00	0.0	0.0	0.0	0.0	0.0
43	2.00	10.00	0.0	0.0	0.0	0.0	0.0
44	2.00	11.00	0.0	0.0	0.0	0.0	0.0
45	2.00	12.00	0.0	0.0	0.0	0.0	0.0
46	2.00	13.00	0.0	0.0	0.0	0.0	0.0
47	2.00	14.00	0.0	0.0	0.0	0.0	0.0
48	2.00	15.00	0.0	0.0	0.0	0.0	0.0
49	3.00	0.0	0.0	0.0	0.0	0.0	0.0
50	3.00	1.00	0.0	0.0	0.0	0.0	0.0
51	3.00	2.00	0.0	0.0	0.0	0.0	0.0
52	3.00	3.00	0.0	0.0	0.0	0.0	0.0
53	3.00	4.00	0.0	0.0	0.0	0.0	0.0
54	3.00	5.00	0.0	0.0	0.0	0.0	0.0
55	3.00	6.00	0.0	0.0	0.0	0.0	0.0
56	3.00	7.00	0.0	0.0	0.0	0.0	0.0
57	3.00	8.00	0.0	0.0	0.0	0.0	0.0
58	3.00	9.00	0.0	0.0	0.0	0.0	0.0
59	3.00	10.00	0.0	0.0	0.0	0.0	0.0
60	3.00	11.00	0.0	0.0	0.0	0.0	0.0
61	3.00	12.00	0.0	0.0	0.0	0.0	0.0
62	3.00	13.00	0.0	0.0	0.0	0.0	0.0
63	3.00	14.00	9.375E-07	4.688E-06	1.069E-04	2.062E-04	0.0
64	3.00	15.00	1.160E-06	5.798E-06	1.322E-04	2.551E-04	0.0
65	4.00	0.0	0.0	0.0	0.0	0.0	0.0
66	4.00	1.00	0.0	0.0	0.0	0.0	0.0
67	4.00	2.00	0.0	0.0	0.0	0.0	0.0
68	4.00	3.00	0.0	0.0	0.0	0.0	0.0
69	4.00	4.00	0.0	0.0	0.0	0.0	0.0
70	4.00	5.00	0.0	0.0	0.0	0.0	0.0
71	4.00	6.00	0.0	0.0	0.0	0.0	0.0
72	4.00	7.00	0.0	0.0	0.0	0.0	0.0
73	4.00	8.00	0.0	0.0	0.0	0.0	0.0
74	4.00	9.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
75	4.00	10.00	0.0	0.0	0.0	0.0	0.0
76	4.00	11.00	6.357E-06	3.178E-05	7.247E-04	1.399E-03	0.0
77	4.00	12.00	1.758E-04	4.074E-05	8.168E-04	1.583E-03	4.442E-06
78	4.00	13.00	2.124E-04	5.089E-05	1.029E-03	1.754E-03	4.953E-06
79	4.00	14.00	2.300E-04	5.267E-05	1.058E-03	1.765E-03	5.228E-06
80	4.00	15.00	2.430E-04	5.395E-05	1.079E-03	1.768E-03	5.598E-06
81	5.00	0.0	0.0	0.0	0.0	0.0	0.0
82	5.00	1.00	0.0	0.0	0.0	0.0	0.0
83	5.00	2.00	0.0	0.0	0.0	0.0	0.0
84	5.00	3.00	0.0	0.0	0.0	0.0	0.0
85	5.00	4.00	0.0	0.0	0.0	0.0	0.0
86	5.00	5.00	0.0	0.0	0.0	0.0	0.0
87	5.00	6.00	0.0	0.0	0.0	0.0	0.0
88	5.00	7.00	0.0	0.0	0.0	0.0	0.0
89	5.00	8.00	0.0	0.0	0.0	0.0	0.0
90	5.00	9.00	2.821E-05	1.410E-04	3.216E-03	6.209E-03	0.0
91	5.00	10.00	1.322E-03	3.072E-04	6.186E-03	1.078E-02	3.139E-05
92	5.00	11.00	1.757E-03	3.825E-04	7.627E-03	1.282E-02	4.120E-05
93	5.00	12.00	2.073E-03	5.423E-04	8.687E-03	1.233E-02	3.509E-05
94	5.00	13.00	1.975E-03	5.352E-04	8.168E-03	1.100E-02	2.998E-05
95	5.00	14.00	1.918E-03	5.420E-04	7.850E-03	1.011E-02	2.637E-05
96	5.00	15.00	1.880E-03	5.464E-04	7.630E-03	9.476E-03	2.366E-05
97	6.00	0.0	0.0	0.0	0.0	0.0	0.0
98	6.00	1.00	0.0	0.0	0.0	0.0	0.0
99	6.00	2.00	0.0	0.0	0.0	0.0	0.0
100	6.00	3.00	0.0	0.0	0.0	0.0	0.0
101	6.00	4.00	0.0	0.0	0.0	0.0	0.0
102	6.00	5.00	0.0	0.0	0.0	0.0	0.0
103	6.00	6.00	0.0	0.0	0.0	0.0	0.0
104	6.00	7.00	0.0	0.0	0.0	0.0	0.0
105	6.00	8.00	1.739E-04	2.730E-04	6.177E-03	1.005E-02	0.0
106	6.00	9.00	5.467E-03	9.759E-04	1.882E-02	2.975E-02	1.281E-04
107	6.00	10.00	9.966E-03	2.553E-03	3.821E-02	5.022E-02	1.562E-04
108	6.00	11.00	1.216E-02	3.413E-03	4.772E-02	5.780E-02	1.572E-04
109	6.00	12.00	1.092E-02	3.282E-03	4.391E-02	5.088E-02	1.202E-04
110	6.00	13.00	9.102E-03	2.754E-03	3.705E-02	4.257E-02	9.552E-05
111	6.00	14.00	8.092E-03	2.556E-03	3.216E-02	3.669E-02	7.836E-05

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
112	6.00	15.00	7.533E-03	2.455E-03	2.85EE-02	3.248E-02	6.596E-05
113	7.00	0.0	0.0	0.0	0.0	0.0	0.0
114	7.00	1.00	0.0	0.0	0.0	0.0	0.0
115	7.00	2.00	0.0	0.0	0.0	0.0	0.0
116	7.00	3.00	0.0	0.0	0.0	0.0	0.0
117	7.00	4.00	0.0	0.0	0.0	0.0	0.0
118	7.00	5.00	0.0	0.0	0.0	0.0	0.0
119	7.00	6.00	0.0	0.0	0.0	0.0	0.0
120	7.00	7.00	4.900E-11	2.673E-11	4.811E-10	2.183E-09	0.0
121	7.00	8.00	2.934E-03	1.369E-03	2.383E-02	2.266E-02	5.457E-05
122	7.00	9.00	3.000E-02	9.354E-03	1.189E-01	1.219E-01	2.761E-04
123	7.00	10.00	3.429E-02	1.124E-02	1.384E-01	1.432E-01	2.625E-04
124	7.00	11.00	4.096E-02	1.376E-02	1.650E-01	1.709E-01	2.914E-04
125	7.00	12.00	3.512E-02	1.209E-02	1.366E-01	1.439E-01	2.342E-04
126	7.00	13.00	3.108E-02	1.092E-02	1.096E-01	1.180E-01	1.915E-04
127	7.00	14.00	4.490E-02	1.678E-02	9.206E-02	1.050E-01	1.625E-04
128	7.00	15.00	5.355E-02	2.070E-02	7.926E-02	1.017E-01	1.421E-04
129	8.00	0.0	0.0	0.0	0.0	0.0	0.0
130	8.00	1.00	0.0	0.0	0.0	0.0	0.0
131	8.00	2.00	0.0	0.0	0.0	0.0	0.0
132	8.00	3.00	0.0	0.0	0.0	0.0	0.0
133	8.00	4.00	0.0	0.0	0.0	0.0	0.0
134	8.00	5.00	0.0	0.0	0.0	0.0	0.0
135	8.00	6.00	3.746E-09	1.088E-09	1.334E-08	1.355E-08	0.0
136	8.00	7.00	1.078E-04	5.880E-05	1.056E-03	4.802E-03	6.044E-15
137	8.00	8.00	1.881E-02	7.254E-03	1.122E-01	1.550E-01	1.524E-04
138	8.00	9.00	3.426E-01	1.401E-01	3.318E-01	4.722E-01	4.570E-04
139	8.00	10.00	3.830E-01	1.580E-01	2.993E-01	4.583E-01	3.585E-04
140	8.00	11.00	3.321E-01	1.359E-01	3.443E-01	4.727E-01	4.250E-04
141	8.00	12.00	3.117E-01	1.269E-01	2.902E-01	4.204E-01	3.568E-04
142	8.00	13.00	3.129E-01	1.261E-01	2.481E-01	3.851E-01	3.545E-04
143	8.00	14.00	3.307E-01	1.327E-01	2.127E-01	3.632E-01	3.260E-04
144	8.00	15.00	3.159E-01	1.260E-01	1.843E-01	3.316E-01	2.884E-04
145	9.00	0.0	0.0	0.0	0.0	0.0	0.0
146	9.00	1.00	0.0	0.0	0.0	0.0	0.0
147	9.00	2.00	0.0	0.0	0.0	0.0	0.0
148	9.00	3.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
149	9.00	4.00	0.0	0.0	0.0	0.0	0.0
150	9.00	5.00	1.823E-02	5.729E-03	7.581E-02	1.376E-01	1.744E-10
151	9.00	6.00	1.969E-01	5.944E-02	6.852E-01	8.249E-01	1.217E-06
152	9.00	7.00	1.970E-01	6.560E-02	5.014E-01	6.222E-01	4.487E-06
153	9.00	8.00	1.135E 02	4.799E 01	6.716E 00	6.153E 01	2.871E-02
154	9.00	9.00	1.844E 01	7.786E 00	1.704E 00	1.063E 01	5.066E-03
155	9.00	10.00	5.851E 00	2.467E 00	8.035E-01	3.649E 00	1.776E-03
156	9.00	11.00	2.848E 00	1.194E 00	6.334E-01	2.026E 00	1.165E-03
157	9.00	12.00	2.091E 00	8.564E-01	5.816E-01	1.600E 00	9.492E-04
158	9.00	13.00	1.704E 00	6.762E-01	5.272E-01	1.355E 00	8.028E-04
159	9.00	14.00	1.551E 00	6.138E-01	4.629E-01	1.222E 00	7.534E-04
160	9.00	15.00	1.346E 00	5.268E-01	4.032E-01	1.066E 00	6.515E-04
161	10.00	0.0	0.0	0.0	0.0	0.0	0.0
162	10.00	1.00	0.0	0.0	0.0	0.0	0.0
163	10.00	2.00	0.0	0.0	0.0	0.0	0.0
164	10.00	3.00	0.0	0.0	0.0	0.0	0.0
165	10.00	4.00	0.0	0.0	0.0	0.0	0.0
166	10.00	5.00	1.548E-01	4.700E-02	4.520E-01	7.142E-01	2.801E-06
167	10.00	6.00	7.187E-01	2.383E-01	1.454E 00	2.520E 00	3.006E-04
168	10.00	7.00	6.878E-01	2.304E-01	1.362E 00	2.501E 00	1.697E-04
169	10.00	8.00	7.853E 01	2.085E 01	7.208E 00	5.676E 01	1.213E-02
170	10.00	9.00	3.485E 01	1.416E 01	2.941E 00	2.085E 01	8.074E-03
171	10.00	10.00	1.840E 01	7.091E 00	1.791E 00	1.166E 01	5.004E-03
172	10.00	11.00	9.371E 00	3.600E 00	1.305E 00	6.226E 00	2.731E-03
173	10.00	12.00	6.827E 00	2.588E 00	1.307E 00	4.837E 00	2.109E-03
174	10.00	13.00	5.835E 00	2.204E 00	1.168E 00	4.135E 00	1.956E-03
175	10.00	14.00	4.733E 00	1.783E 00	9.905E-01	3.355E 00	1.633E-03
176	10.00	15.00	3.946E 00	1.481E 00	8.501E-01	2.855E 00	1.392E-03
177	11.00	0.0	0.0	0.0	0.0	0.0	0.0
178	11.00	1.00	0.0	0.0	0.0	0.0	0.0
179	11.00	2.00	0.0	0.0	0.0	0.0	0.0
180	11.00	3.00	0.0	0.0	0.0	0.0	0.0
181	11.00	4.00	0.0	0.0	0.0	0.0	0.0
182	11.00	5.00	7.669E-02	2.386E-02	1.954E-01	3.774E-01	9.555E-10
183	11.00	6.00	6.114E-01	1.967E-01	1.667E 00	3.190E 00	2.386E-04
184	11.00	7.00	4.913E-01	1.644E-01	1.354E 00	2.263E 00	2.055E-04
185	11.00	8.00	4.606E 00	1.737E 00	1.620E 01	1.603E 01	1.559E-04

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
186	11.00	9.00	1.176E 02	4.039E 01	8.152E 00	7.495E 01	1.502E-02
187	11.00	10.00	5.261E 01	1.727E 01	6.076E 00	3.437E 01	7.001E-03
188	11.00	11.00	2.466E 01	8.315E 00	3.456E 00	1.666E 01	4.825E-03
189	11.00	12.00	1.697E 01	5.976E 00	2.731E 00	1.156E 01	4.301E-03
190	11.00	13.00	1.318E 01	4.723E 00	2.256E 00	9.041E 00	3.676E-03
191	11.00	14.00	1.063E 01	3.838E 00	1.900E 00	7.337E 00	3.142E-03
192	11.00	15.00	8.755E 00	3.175E 00	1.617E 00	6.076E 00	2.712E-03
193	12.00	0.0	0.0	0.0	0.0	0.0	0.0
194	12.00	1.00	0.0	0.0	0.0	0.0	0.0
195	12.00	2.00	0.0	0.0	0.0	0.0	0.0
196	12.00	3.00	0.0	0.0	0.0	0.0	0.0
197	12.00	4.00	0.0	0.0	0.0	0.0	0.0
198	12.00	5.00	1.943E-07	8.110E-08	1.088E-06	1.989E-06	0.0
199	12.00	6.00	5.625E-01	1.780E-01	1.545E 00	2.999E 00	2.677E-04
200	12.00	7.00	4.654E-01	1.437E-01	1.345E 00	2.490E 00	1.290E-03
201	12.00	8.00	5.638E 00	3.244E 00	1.166E 00	2.192E 00	1.088E-03
202	12.00	9.00	2.148E 02	8.055E 01	1.777E 01	1.251E 02	4.087E-02
203	12.00	10.00	7.086E 01	2.640E 01	9.430E 00	3.989E 01	3.465E-02
204	12.00	11.00	3.710E 01	1.338E 01	5.437E 00	2.274E 01	1.410E-02
205	12.00	12.00	2.618E 01	9.293E 00	4.197E 00	1.695E 01	8.752E-03
206	12.00	13.00	2.165E 01	7.694E 00	3.573E 00	1.431E 01	7.017E-03
207	12.00	14.00	1.821E 01	6.498E 00	3.057E 00	1.213E 01	5.882E-03
208	12.00	15.00	1.530E 01	5.484E 00	2.625E 00	1.028E 01	5.000E-03
209	13.00	0.0	0.0	0.0	0.0	0.0	0.0
210	13.00	1.00	0.0	0.0	0.0	0.0	0.0
211	13.00	2.00	0.0	0.0	0.0	0.0	0.0
212	13.00	3.00	0.0	0.0	0.0	0.0	0.0
213	13.00	4.00	0.0	0.0	0.0	0.0	0.0
214	13.00	5.00	0.0	0.0	0.0	0.0	0.0
215	13.00	6.00	5.194E-01	1.638E-01	1.400E 00	2.706E 00	1.363E-04
216	13.00	7.00	4.972E-01	1.547E-01	1.344E 00	2.702E 00	6.572E-04
217	13.00	8.00	3.339E-01	1.046E-01	9.057E-01	1.781E 00	5.157E-04
218	13.00	9.00	2.267E 01	8.417E 00	5.563E 00	2.022E 01	1.568E-02
219	13.00	10.00	4.986E 01	1.756E 01	7.749E 00	3.195E 01	2.812E-02
220	13.00	11.00	3.650E 01	1.335E 01	5.642E 00	2.278E 01	1.908E-02
221	13.00	12.00	2.878E 01	1.042E 01	4.791E 00	1.844E 01	1.338E-02
222	13.00	13.00	2.593E 01	9.323E 00	4.380E 00	1.686E 01	1.088E-02

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
223	13.00	14.00	2.324E 01	8.331E 00	3.93EE 00	1.527E 01	9.131E-03
224	13.00	15.00	2.051E 01	7.347E 00	3.502E 00	1.359E 01	7.741E-03
225	14.00	0.0	0.0	0.0	0.0	0.0	0.0
226	14.00	1.00	0.0	0.0	0.0	0.0	0.0
227	14.00	2.00	0.0	0.0	0.0	0.0	0.0
228	14.00	3.00	0.0	0.0	0.0	0.0	0.0
229	14.00	4.00	0.0	0.0	0.0	0.0	0.0
230	14.00	5.00	0.0	0.0	0.0	0.0	0.0
231	14.00	6.00	3.471E-01	1.095E-01	9.284E-01	1.742E 00	1.547E-05
232	14.00	7.00	5.590E-01	1.766E-01	1.530E 00	3.072E 00	4.176E-04
233	14.00	8.00	3.638E-01	1.116E-01	9.432E-01	1.900E 00	6.570E-04
234	14.00	9.00	4.616E-01	1.346E-01	1.017E 00	2.054E 00	1.791E-03
235	14.00	10.00	4.879E 00	1.817E 00	3.221E 00	8.044E 00	3.624E-03
236	14.00	11.00	1.187E 01	4.311E 00	3.177E 00	1.010E 01	7.031E-03
237	14.00	12.00	1.706E 01	6.165E 00	3.639E 00	1.246E 01	9.227E-03
238	14.00	13.00	2.034E 01	7.351E 00	3.963E 00	1.413E 01	1.006E-02
239	14.00	14.00	2.141E 01	7.727E 00	3.970E 00	1.457E 01	9.817E-03
240	14.00	15.00	2.094E 01	7.538E 00	3.805E 00	1.416E 01	9.046E-03
241	15.00	0.0	0.0	0.0	0.0	0.0	0.0
242	15.00	1.00	0.0	0.0	0.0	0.0	0.0
243	15.00	2.00	0.0	0.0	0.0	0.0	0.0
244	15.00	3.00	0.0	0.0	0.0	0.0	0.0
245	15.00	4.00	0.0	0.0	0.0	0.0	0.0
246	15.00	5.00	0.0	0.0	0.0	0.0	0.0
247	15.00	6.00	6.912E-03	2.186E-03	1.862E-02	3.574E-02	8.256E-05
248	15.00	7.00	1.012E 00	3.214E-01	2.775E 00	5.439E 00	2.598E-04
249	15.00	8.00	1.106E 00	3.489E-01	2.988E 00	5.846E 00	4.811E-04
250	15.00	9.00	9.337E-01	2.953E-01	2.561E 00	5.055E 00	6.588E-04
251	15.00	10.00	1.029E 00	3.326E-01	2.558E 00	5.350E 00	1.615E-03
252	15.00	11.00	2.523E 00	9.192E-01	2.532E 00	5.806E 00	1.889E-03
253	15.00	12.00	5.860E 00	2.110E 00	2.520E 00	6.740E 00	2.585E-03
254	15.00	13.00	1.034E 01	3.730E 00	3.053E 00	9.159E 00	5.758E-03
255	15.00	14.00	1.394E 01	5.029E 00	3.361E 00	1.056E 01	7.140E-03
256	15.00	15.00	1.616E 01	5.826E 00	3.499E 00	1.197E 01	7.752E-03
257	16.00	0.0	0.0	0.0	0.0	0.0	0.0
258	16.00	1.00	0.0	0.0	0.0	0.0	0.0
259	16.00	2.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
260	16.00	3.00	0.0	0.0	0.0	0.0	0.0
261	16.00	4.00	0.0	0.0	0.0	0.0	0.0
262	16.00	5.00	0.0	0.0	0.0	0.0	0.0
263	16.00	6.00	0.0	0.0	0.0	0.0	0.0
264	16.00	7.00	1.577E-01	5.020E-02	4.480E-01	8.760E-01	1.111E-04
265	16.00	8.00	6.609E-01	2.140E-01	1.928E 00	4.018E 00	4.259E-04
266	16.00	9.00	6.237E-01	2.008E-01	1.792E 00	3.711E 00	4.448E-04
267	16.00	10.00	7.722E-01	2.473E-01	2.179E 00	4.617E 00	5.179E-04
268	16.00	11.00	9.780E-01	3.301E-01	2.289E 00	4.922E 00	5.819E-04
269	16.00	12.00	1.760E 00	6.195E-01	2.140E 00	4.766E 00	1.350E-03
270	16.00	13.00	3.977E 00	1.423E 00	2.432E 00	6.029E 00	2.582E-03
271	16.00	14.00	6.924E 00	2.485E 00	2.711E 00	7.492E 00	2.962E-03
272	16.00	15.00	9.785E 00	3.523E 00	2.948E 00	8.864E 00	5.149E-03
273	17.00	0.0	0.0	0.0	0.0	0.0	0.0
274	17.00	1.00	0.0	0.0	0.0	0.0	0.0
275	17.00	2.00	0.0	0.0	0.0	0.0	0.0
276	17.00	3.00	0.0	0.0	0.0	0.0	0.0
277	17.00	4.00	0.0	0.0	0.0	0.0	0.0
278	17.00	5.00	0.0	0.0	0.0	0.0	0.0
279	17.00	6.00	0.0	0.0	0.0	0.0	0.0
280	17.00	7.00	1.186E-03	3.792E-04	3.332E-03	6.636E-03	1.467E-06
281	17.00	8.00	6.507E-02	2.117E-02	1.944E-01	4.111E-01	6.212E-05
282	17.00	9.00	1.476E-01	4.712E-02	4.220E-01	8.484E-01	1.313E-04
283	17.00	10.00	3.077E-01	9.880E-02	8.804E-01	1.820E 00	2.402E-04
284	17.00	11.00	5.538E-01	1.780E-01	1.566E 00	3.402E 00	6.255E-04
285	17.00	12.00	7.260E-01	2.411E-01	1.672E 00	3.586E 00	6.869E-04
286	17.00	13.00	1.416E 00	4.938E-01	1.827E 00	4.072E 00	1.080E-03
287	17.00	14.00	2.914E 00	1.035E 00	2.126E 00	5.133E 00	1.952E-03
288	17.00	15.00	4.939E 00	1.768E 00	2.356E 00	6.206E 00	2.901E-03
289	18.00	0.0	0.0	0.0	0.0	0.0	0.0
290	18.00	1.00	0.0	0.0	0.0	0.0	0.0
291	18.00	2.00	0.0	0.0	0.0	0.0	0.0
292	18.00	3.00	0.0	0.0	0.0	0.0	0.0
293	18.00	4.00	0.0	0.0	0.0	0.0	0.0
294	18.00	5.00	0.0	0.0	0.0	0.0	0.0
295	18.00	6.00	0.0	0.0	0.0	0.0	0.0
296	18.00	7.00	4.180E-08	1.346E-08	1.188E-07	2.452E-07	1.714E-11

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
297	18.00	8.00	4.219E-03	1.371E-03	1.248E-02	2.618E-02	3.232E-06
298	18.00	9.00	3.316E-02	1.071E-02	9.666E-02	2.000E-01	2.541E-05
299	18.00	10.00	1.008E-01	3.248E-02	2.918E-01	6.031E-01	7.359E-05
300	18.00	11.00	2.074E-01	6.521E-02	5.769E-01	1.247E 00	3.498E-04
301	18.00	12.00	3.929E-01	1.277E-01	1.085E 00	2.361E 00	4.145E-04
302	18.00	13.00	5.907E-01	1.973E-01	1.262E 00	2.741E 00	5.480E-04
303	18.00	14.00	1.150E 00	3.988E-01	1.490E 00	3.355E 00	8.834E-04
304	18.00	15.00	2.231E 00	7.886E-01	1.778E 00	4.259E 00	1.524E-03
305	19.00	0.0	0.0	0.0	0.0	0.0	0.0
306	19.00	1.00	0.0	0.0	0.0	0.0	0.0
307	19.00	2.00	0.0	0.0	0.0	0.0	0.0
308	19.00	3.00	0.0	0.0	0.0	0.0	0.0
309	19.00	4.00	0.0	0.0	0.0	0.0	0.0
310	19.00	5.00	0.0	0.0	0.0	0.0	0.0
311	19.00	6.00	0.0	0.0	0.0	0.0	0.0
312	19.00	7.00	0.0	0.0	0.0	0.0	0.0
313	19.00	8.00	7.078E-04	2.379E-04	2.174E-03	4.977E-03	1.064E-07
314	19.00	9.00	4.435E-03	1.450E-03	1.325E-02	2.765E-02	1.882E-06
315	19.00	10.00	2.389E-02	7.711E-03	6.946E-02	1.439E-01	1.779E-05
316	19.00	11.00	7.108E-02	2.232E-02	1.967E-01	4.215E-01	1.249E-04
317	19.00	12.00	1.410E-01	4.432E-02	3.873E-01	8.545E-01	2.742E-04
318	19.00	13.00	2.912E-01	9.552E-02	7.733E-01	1.695E 00	3.119E-04
319	19.00	14.00	4.983E-01	1.668E-01	1.002E 00	2.217E 00	4.738E-04
320	19.00	15.00	9.556E-01	3.312E-01	1.206E 00	2.755E 00	7.376E-04
321	20.00	0.0	0.0	0.0	0.0	0.0	0.0
322	20.00	1.00	0.0	0.0	0.0	0.0	0.0
323	20.00	2.00	0.0	0.0	0.0	0.0	0.0
324	20.00	3.00	0.0	0.0	0.0	0.0	0.0
325	20.00	4.00	0.0	0.0	0.0	0.0	0.0
326	20.00	5.00	0.0	0.0	0.0	0.0	0.0
327	20.00	6.00	0.0	0.0	0.0	0.0	0.0
328	20.00	7.00	0.0	0.0	0.0	0.0	0.0
329	20.00	8.00	3.383E-08	1.066E-08	9.027E-08	1.886E-07	1.962E-11
330	20.00	9.00	9.225E-04	3.080E-04	2.824E-03	6.302E-03	1.797E-07
331	20.00	10.00	4.781E-03	1.550E-03	1.400E-02	2.933E-02	3.247E-06
332	20.00	11.00	1.814E-02	5.857E-03	5.278E-02	1.100E-01	1.311E-05
333	20.00	12.00	5.719E-02	1.741E-02	1.517E-01	3.555E-01	1.828E-04

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
334	20.00	13.00	1.620E-01	5.255E-02	4.589E-01	1.034E 00	1.529E-04
335	20.00	14.00	2.465E-01	8.151E-02	6.288E-01	1.414E 00	2.859E-04
336	20.00	15.00	4.358E-01	1.471E-01	8.111E-01	1.829E 00	4.228E-04
337	21.00	0.0	0.0	0.0	0.0	0.0	0.0
338	21.00	1.00	0.0	0.0	0.0	0.0	0.0
339	21.00	2.00	0.0	0.0	0.0	0.0	0.0
340	21.00	3.00	0.0	0.0	0.0	0.0	0.0
341	21.00	4.00	0.0	0.0	0.0	0.0	0.0
342	21.00	5.00	0.0	0.0	0.0	0.0	0.0
343	21.00	6.00	0.0	0.0	0.0	0.0	0.0
344	21.00	7.00	0.0	0.0	0.0	0.0	0.0
345	21.00	8.00	1.649E-09	5.145E-10	6.759E-09	1.094E-08	0.0
346	21.00	9.00	6.879E-04	2.317E-04	2.112E-03	4.866E-03	2.342E-08
347	21.00	10.00	1.288E-03	4.248E-04	3.853E-03	8.437E-03	4.886E-07
348	21.00	11.00	4.544E-03	1.481E-03	1.341E-02	2.807E-02	2.095E-06
349	21.00	12.00	2.108E-02	6.138E-03	5.182E-02	1.259E-01	1.019E-04
350	21.00	13.00	4.310E-02	1.324E-02	1.147E-01	2.689E-01	1.281E-04
351	21.00	14.00	1.433E-01	4.665E-02	3.985E-01	9.227E-01	1.965E-04
352	21.00	15.00	2.202E-01	7.333E-02	5.401E-01	1.240E 00	2.753E-04
353	22.00	0.0	0.0	0.0	0.0	0.0	0.0
354	22.00	1.00	0.0	0.0	0.0	0.0	0.0
355	22.00	2.00	0.0	0.0	0.0	0.0	0.0
356	22.00	3.00	0.0	0.0	0.0	0.0	0.0
357	22.00	4.00	0.0	0.0	0.0	0.0	0.0
358	22.00	5.00	0.0	0.0	0.0	0.0	0.0
359	22.00	6.00	0.0	0.0	0.0	0.0	0.0
360	22.00	7.00	0.0	0.0	0.0	0.0	0.0
361	22.00	8.00	0.0	0.0	0.0	0.0	0.0
362	22.00	9.00	9.224E-09	3.073E-09	2.946E-08	6.463E-08	0.0
363	22.00	10.00	7.636E-04	2.563E-04	2.336E-03	5.330E-03	5.825E-08
364	22.00	11.00	1.465E-03	4.831E-04	4.386E-03	9.532E-03	4.377E-07
365	22.00	12.00	4.768E-03	1.592E-03	1.539E-02	3.746E-02	2.953E-06
366	22.00	13.00	1.878E-02	5.466E-03	4.650E-02	1.205E-01	9.537E-05
367	22.00	14.00	3.813E-02	1.163E-02	9.894E-02	2.495E-01	1.430E-04
368	22.00	15.00	1.404E-01	4.592E-02	3.837E-01	9.078E-01	2.054E-04
369	23.00	0.0	0.0	0.0	0.0	0.0	0.0
370	23.00	1.00	0.0	0.0	0.0	0.0	0.0

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM AIRCRAFT SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
371	23.00	2.00	0.0	0.0	0.0	0.0	0.0
372	23.00	3.00	0.0	0.0	0.0	0.0	0.0
373	23.00	4.00	0.0	0.0	0.0	0.0	0.0
374	23.00	5.00	0.0	0.0	0.0	0.0	0.0
375	23.00	6.00	0.0	0.0	0.0	0.0	0.0
376	23.00	7.00	0.0	0.0	0.0	0.0	0.0
377	23.00	8.00	0.0	0.0	0.0	0.0	0.0
378	23.00	9.00	0.0	0.0	0.0	0.0	0.0
379	23.00	10.00	6.851E-04	2.310E-04	2.107E-03	4.867E-03	0.0
380	23.00	11.00	8.200E-04	2.740E-04	2.488E-03	5.649E-03	1.183E-07
381	23.00	12.00	1.632E-03	5.351E-04	4.833E-03	1.045E-02	7.376E-07
382	23.00	13.00	9.139E-03	2.471E-03	2.002E-02	5.527E-02	7.121E-05
383	23.00	14.00	1.844E-02	5.362E-03	4.641E-02	1.317E-01	1.058E-04
384	23.00	15.00	3.615E-02	1.091E-02	8.960E-02	2.432E-01	1.681E-04
385	24.00	0.0	0.0	0.0	0.0	0.0	0.0
386	24.00	1.00	0.0	0.0	0.0	0.0	0.0
387	24.00	2.00	0.0	0.0	0.0	0.0	0.0
388	24.00	3.00	0.0	0.0	0.0	0.0	0.0
389	24.00	4.00	0.0	0.0	0.0	0.0	0.0
390	24.00	5.00	0.0	0.0	0.0	0.0	0.0
391	24.00	6.00	0.0	0.0	0.0	0.0	0.0
392	24.00	7.00	0.0	0.0	0.0	0.0	0.0
393	24.00	8.00	0.0	0.0	0.0	0.0	0.0
394	24.00	9.00	0.0	0.0	0.0	0.0	0.0
395	24.00	10.00	0.0	0.0	0.0	0.0	0.0
396	24.00	11.00	6.953E-04	2.343E-04	2.138E-03	4.932E-03	6.750E-09
397	24.00	12.00	9.091E-04	3.026E-04	2.751E-03	6.181E-03	1.741E-07
398	24.00	13.00	4.638E-03	1.181E-03	8.857E-03	2.780E-02	4.299E-05
399	24.00	14.00	9.750E-03	2.697E-03	2.323E-02	7.466E-02	7.680E-05
400	24.00	15.00	2.025E-02	5.762E-03	4.936E-02	1.541E-01	1.422E-04

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	1.00	0.0	0.0	0.0	0.0	0.0
3	0.0	2.00	0.0	0.0	0.0	0.0	0.0
4	0.0	3.00	-3.487E-07	-6.117E-08	-2.641E-08	-1.022E-08	-1.508E-08
5	0.0	4.00	2.232E-03	3.916E-04	1.691E-04	6.543E-05	9.653E-05
6	0.0	5.00	9.137E-04	1.603E-04	6.915E-05	2.678E-05	3.951E-05
7	0.0	6.00	-2.437E-03	-4.305E-04	-1.744E-04	-3.212E-05	-3.525E-05
8	0.0	7.00	3.259E 01	5.823E 00	2.378E 00	5.007E-01	5.959E-01
9	0.0	8.00	2.655E 01	4.686E 00	1.914E 00	4.029E-01	4.796E-01
10	0.0	9.00	2.027E 01	3.576E 00	1.461E 00	3.076E-01	3.662E-01
11	0.0	10.00	1.482E 01	2.616E 00	1.069E 00	2.250E-01	2.678E-01
12	0.0	11.00	5.809E 00	1.025E 00	4.188E-01	8.818E-02	1.050E-01
13	0.0	12.00	3.362E 00	5.934E-01	2.424E-01	5.106E-02	6.080E-02
14	0.0	13.00	2.594E 00	4.578E-01	1.870E-01	3.943E-02	4.697E-02
15	0.0	14.00	2.496E 00	4.405E-01	1.800E-01	3.799E-02	4.528E-02
16	0.0	15.00	2.402E 00	4.240E-01	1.732E-01	3.661E-02	4.367E-02
17	1.00	0.0	0.0	0.0	0.0	0.0	0.0
18	1.00	1.00	0.0	0.0	0.0	0.0	0.0
19	1.00	2.00	0.0	0.0	0.0	0.0	0.0
20	1.00	3.00	-3.968E-06	-6.961E-07	-3.005E-07	-1.162E-07	-1.716E-07
21	1.00	4.00	2.997E-02	5.257E-03	2.269E-03	8.784E-04	1.296E-03
22	1.00	5.00	3.950E 01	6.972E 00	2.848E 00	5.997E-01	7.138E-01
23	1.00	6.00	7.434E 01	1.312E 01	5.359E 00	1.128E 00	1.343E 00
24	1.00	7.00	6.828E 01	1.205E 01	4.921E 00	1.036E 00	1.233E 00
25	1.00	8.00	5.855E 01	1.033E 01	4.221E 00	8.886E-01	1.058E 00
26	1.00	9.00	4.777E 01	8.431E 00	3.443E 00	7.250E-01	8.629E-01
27	1.00	10.00	3.752E 01	6.622E 00	2.705E 00	5.695E-01	6.779E-01
28	1.00	11.00	1.237E 01	2.183E 00	8.917E-01	1.879E-01	2.238E-01
29	1.00	12.00	7.752E 00	1.368E 00	5.585E-01	1.175E-01	1.405E-01
30	1.00	13.00	6.229E 00	1.099E 00	4.491E-01	9.453E-02	1.132E-01
31	1.00	14.00	5.709E 00	1.008E 00	4.117E-01	8.674E-02	1.042E-01
32	1.00	15.00	5.258E 00	9.280E-01	3.792E-01	8.055E-02	9.633E-02
33	2.00	0.0	0.0	0.0	0.0	0.0	0.0
34	2.00	1.00	0.0	0.0	0.0	0.0	0.0
35	2.00	2.00	0.0	0.0	0.0	0.0	0.0
36	2.00	3.00	-3.750E-05	-6.578E-06	-2.839E-06	-1.059E-06	-1.621E-06
37	2.00	4.00	2.890E-01	5.069E-02	2.188E-02	8.469E-03	1.249E-02

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
38	2.00	5.00	1.364E-01	2.392E-02	1.036E-02	4.105E-03	6.088E-03
39	2.00	6.00	1.181E 02	2.089E 01	8.515E 00	1.794E 00	2.135E 00
40	2.00	7.00	1.146E 02	2.022E 01	8.258E 00	1.739E 00	2.070E 00
41	2.00	8.00	1.050E 02	1.853E 01	7.566E 00	1.594E 00	1.897E 00
42	2.00	9.00	9.175E 01	1.619E 01	6.613E 00	1.393E 00	1.658E 00
43	2.00	10.00	5.510E 01	9.725E 00	3.972E 00	8.370E-01	9.968E-01
44	2.00	11.00	2.177E 01	3.843E 00	1.570E 00	3.306E-01	3.954E-01
45	2.00	12.00	1.437E 01	2.536E 00	1.036E 00	2.159E-01	2.621E-01
46	2.00	13.00	1.218E 01	2.150E 00	8.786E-01	1.866E-01	2.232E-01
47	2.00	14.00	1.086E 01	1.916E 00	7.832E-01	1.666E-01	1.998E-01
48	2.00	15.00	9.824E 00	1.734E 00	7.090E-01	1.521E-01	1.828E-01
49	3.00	0.0	0.0	0.0	0.0	0.0	0.0
50	3.00	1.00	0.0	0.0	0.0	0.0	0.0
51	3.00	2.00	-3.002E-04	-5.266E-05	-2.273E-05	-8.799E-06	-1.298E-05
52	3.00	3.00	3.355E 00	5.885E-01	2.540E-01	9.833E-02	1.451E-01
53	3.00	4.00	2.011E 00	3.527E-01	1.523E-01	5.894E-02	8.694E-02
54	3.00	5.00	1.106E 00	1.940E-01	8.375E-02	3.256E-02	4.807E-02
55	3.00	6.00	1.527E 02	2.695E 01	1.101E 01	2.324E 00	2.770E 00
56	3.00	7.00	1.569E 02	2.770E 01	1.131E 01	2.388E 00	2.841E 00
57	3.00	8.00	1.534E 02	2.707E 01	1.106E 01	2.331E 00	2.776E 00
58	3.00	9.00	1.438E 02	2.538E 01	1.037E 01	2.186E 00	2.604E 00
59	3.00	10.00	5.835E 01	1.030E 01	4.207E 00	8.900E-01	1.062E 00
60	3.00	11.00	3.165E 01	5.586E 00	2.282E 00	4.855E-01	5.808E-01
61	3.00	12.00	2.273E 01	4.011E 00	1.640E 00	3.506E-01	4.206E-01
62	3.00	13.00	1.996E 01	3.522E 00	1.440E 00	3.095E-01	3.714E-01
63	3.00	14.00	1.768E 01	3.120E 00	1.276E 00	2.751E-01	3.310E-01
64	3.00	15.00	1.616E 01	2.852E 00	1.168E 00	2.565E-01	3.114E-01
65	4.00	0.0	0.0	0.0	0.0	0.0	0.0
66	4.00	1.00	0.0	0.0	0.0	0.0	0.0
67	4.00	2.00	-1.562E-03	-2.740E-04	-1.183E-04	-4.578E-05	-6.753E-05
68	4.00	3.00	1.540E 01	2.701E 00	1.166E 00	4.512E-01	6.657E-01
69	4.00	4.00	1.016E 01	1.783E 00	7.696E-01	2.980E-01	4.396E-01
70	4.00	5.00	1.406E 02	2.480E 01	1.015E 01	2.222E 00	2.697E 00
71	4.00	6.00	1.607E 02	2.837E 01	1.159E 01	2.470E 00	2.998E 00
72	4.00	7.00	1.755E 02	3.097E 01	1.265E 01	2.682E 00	3.204E 00
73	4.00	8.00	1.830E 02	3.231E 01	1.320E 01	2.794E 00	3.335E 00
74	4.00	9.00	1.844E 02	3.254E 01	1.329E 01	2.814E 00	3.359E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
75	4.00	10.00	6.165E 01	1.088E 01	4.44EE 00	9.52EE-01	1.144E 00
76	4.00	11.00	4.294E 01	7.555E 00	3.096E 00	6.711E-01	8.028E-01
77	4.00	12.00	3.258E 01	5.744E 00	2.352E 00	5.136E-01	6.185E-01
78	4.00	13.00	2.861E 01	5.046E 00	2.067E 00	4.535E-01	5.474E-01
79	4.00	14.00	2.805E 01	4.949E 00	2.035E 00	4.737E-01	5.879E-01
80	4.00	15.00	2.461E 01	4.342E 00	1.785E 00	4.124E-01	5.097E-01
81	5.00	0.0	0.0	0.0	0.0	0.0	0.0
82	5.00	1.00	1.886E 01	3.309E 00	1.42EE 00	5.52EE-01	8.155E-01
83	5.00	2.00	-4.432E-03	-7.775E-04	-3.356E-04	-1.299E-04	-1.916E-04
84	5.00	3.00	5.082E 01	8.916E 00	3.849E 00	1.49CE 00	2.198E 00
85	5.00	4.00	3.728E 01	6.539E 00	2.822E 00	1.092E 00	1.612E 00
86	5.00	5.00	1.377E 02	2.428E 01	1.002E 01	2.454E 00	3.137E 00
87	5.00	6.00	1.437E 02	2.536E 01	1.039E 01	2.292E 00	2.754E 00
88	5.00	7.00	1.626E 02	2.869E 01	1.174E 01	2.536E 00	3.059E 00
89	5.00	8.00	1.802E 02	3.181E 01	1.301E 01	2.79CE 00	3.353E 00
90	5.00	9.00	1.163E 02	2.053E 01	8.403E 00	1.824E 00	2.194E 00
91	5.00	10.00	5.875E 01	1.037E 01	4.253E 00	9.511E-01	1.148E 00
92	5.00	11.00	7.950E 01	1.386E 01	5.713E 00	1.282E 00	1.503E 00
93	5.00	12.00	4.666E 01	8.195E 00	3.375E 00	7.677E-01	9.170E-01
94	5.00	13.00	2.852E 01	6.780E 00	2.792E 00	6.404E-01	7.713E-01
95	5.00	14.00	4.339E 01	7.649E 00	3.172E 00	8.169E-01	1.042E 00
96	5.00	15.00	3.744E 01	6.601E 00	2.736E 00	6.552E-01	8.813E-01
97	6.00	0.0	0.0	0.0	0.0	0.0	0.0
98	6.00	1.00	-8.255E-03	-1.448E-03	-6.251E-04	-2.420E-04	-3.569E-04
99	6.00	2.00	1.379E 02	2.420E 01	1.045E 01	4.043E 00	5.964E 00
100	6.00	3.00	1.212E 02	2.127E 01	9.181E 00	3.554E 00	5.242E 00
101	6.00	4.00	9.910E 01	1.738E 01	7.505E 00	2.905E 00	4.285E 00
102	6.00	5.00	1.192E 02	2.059E 01	8.775E 00	2.503E 00	3.389E 00
103	6.00	6.00	1.360E 02	2.407E 01	9.891E 00	2.351E 00	2.974E 00
104	6.00	7.00	1.335E 02	2.358E 01	9.673E 00	2.20CE 00	2.723E 00
105	6.00	8.00	1.513E 02	2.671E 01	1.095E 01	2.447E 00	2.984E 00
106	6.00	9.00	1.034E 02	1.808E 01	7.46CE 00	1.725E 00	2.061E 00
107	6.00	10.00	1.316E 02	2.285E 01	9.462E 00	2.172E 00	2.504E 00
108	6.00	11.00	1.457E 02	2.522E 01	1.056E 01	2.752E 00	3.362E 00
109	6.00	12.00	6.257E 01	1.094E 01	4.578E 00	1.187E 00	1.426E 00
110	6.00	13.00	4.954E 01	8.696E 00	3.633E 00	9.368E-01	1.135E 00
111	6.00	14.00	7.100E 01	1.251E 01	5.259E 00	1.544E 00	2.030E 00

NAS MIRAMAR
MONTH = MAY PERIOD = 1200 TO 1200 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
112	6.00	15.00	6.045E 01	1.065E 01	4.474E 00	1.297E 00	1.655E 00
113	7.00	0.0	0.0	0.0	0.0	0.0	0.0
114	7.00	1.00	-1.474E-02	-2.585E-03	-1.116E-03	-4.320E-04	-6.372E-04
115	7.00	2.00	2.165E 02	3.798E 01	1.640E 01	6.346E 00	9.362E 00
116	7.00	3.00	2.104E 02	3.691E 01	1.593E 01	6.167E 00	9.097E 00
117	7.00	4.00	2.157E 02	3.786E 01	1.634E 01	5.976E 00	8.709E 00
118	7.00	5.00	1.042E 02	1.833E 01	7.759E 00	2.525E 00	3.580E 00
119	7.00	6.00	1.785E 02	3.183E 01	1.307E 01	3.253E 00	4.214E 00
120	7.00	7.00	1.102E 02	1.945E 01	8.040E 00	2.005E 00	2.587E 00
121	7.00	8.00	1.163E 02	2.052E 01	8.474E 00	2.071E 00	2.588E 00
122	7.00	9.00	2.013E 02	3.465E 01	1.562E 01	7.552E 00	1.122E 01
123	7.00	10.00	2.548E 02	4.374E 01	1.976E 01	9.681E 00	1.422E 01
124	7.00	11.00	1.890E 02	3.250E 01	1.464E 01	6.932E 00	1.008E 01
125	7.00	12.00	8.006E 01	1.355E 01	6.087E 00	2.211E 00	2.899E 00
126	7.00	13.00	1.376E 02	2.422E 01	1.036E 01	3.526E 00	4.779E 00
127	7.00	14.00	1.197E 02	2.105E 01	8.991E 00	3.002E 00	4.032E 00
128	7.00	15.00	1.027E 02	1.811E 01	7.704E 00	2.545E 00	3.385E 00
129	8.00	0.0	1.029E 02	1.804E 01	7.785E 00	3.015E 00	4.447E 00
130	8.00	1.00	2.071E 02	3.634E 01	1.565E 01	6.072E 00	8.957E 00
131	8.00	2.00	2.448E 02	4.294E 01	1.854E 01	7.175E 00	1.058E 01
132	8.00	3.00	2.645E 02	4.640E 01	2.003E 01	7.752E 00	1.144E 01
133	8.00	4.00	2.779E 02	4.882E 01	2.102E 01	8.015E 00	1.177E 01
134	8.00	5.00	1.585E 02	2.818E 01	1.177E 01	3.554E 00	4.913E 00
135	8.00	6.00	1.198E 02	2.134E 01	8.856E 00	2.514E 00	3.399E 00
136	8.00	7.00	8.713E 01	1.547E 01	6.431E 00	1.825E 00	2.471E 00
137	8.00	8.00	6.571E 01	1.168E 01	4.975E 00	1.558E 00	1.960E 00
138	8.00	9.00	5.345E 01	9.591E 00	4.273E 00	1.674E 00	1.638E 00
139	8.00	10.00	3.643E 02	6.248E 01	2.887E 01	1.626E 01	2.423E 01
140	8.00	11.00	1.880E 02	3.247E 01	1.493E 01	7.951E 00	1.133E 01
141	8.00	12.00	9.878E 01	1.728E 01	7.796E 00	3.675E 00	4.775E 00
142	8.00	13.00	2.135E 02	3.770E 01	1.627E 01	6.172E 00	8.269E 00
143	8.00	14.00	1.925E 02	3.405E 01	1.463E 01	5.440E 00	7.208E 00
144	8.00	15.00	1.702E 02	3.013E 01	1.291E 01	4.753E 00	6.250E 00
145	9.00	0.0	-7.255E-03	-1.273E-03	-5.494E-04	-2.127E-04	-3.137E-04
146	9.00	1.00	1.552E 02	2.723E 01	1.175E 01	4.549E 00	6.711E 00
147	9.00	2.00	2.004E 02	3.516E 01	1.516E 01	5.874E 00	8.665E 00
148	9.00	3.00	2.558E 02	5.133E 01	2.035E 01	9.166E 00	1.181E 01

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NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES							
RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
149	9.00	4.00	2.085E 02	3.770E 01	1.636E 01	8.183E 00	1.197E 01
150	9.00	5.00	1.221E 02	2.199E 01	9.580E 00	4.673E 00	6.609E 00
151	9.00	6.00	7.709E 01	1.408E 01	6.572E 00	3.197E 00	3.323E 00
152	9.00	7.00	6.916E 01	1.265E 01	5.735E 00	2.566E 00	2.676E 00
153	9.00	8.00	1.707E 02	5.849E 01	1.108E 01	6.317E 01	2.277E 00
154	9.00	9.00	7.130E 01	1.750E 01	5.727E 00	1.212E 01	2.040E 00
155	9.00	10.00	2.139E 02	3.845E 01	1.734E 01	1.241E 01	1.330E 01
156	9.00	11.00	2.158E 02	3.810E 01	1.740E 01	1.108E 01	1.376E 01
157	9.00	12.00	1.086E 02	1.962E 01	8.837E 00	5.526E 00	5.797E 00
158	9.00	13.00	2.903E 02	5.174E 01	2.234E 01	9.545E 00	1.175E 01
159	9.00	14.00	2.759E 02	4.920E 01	2.116E 01	8.827E 00	1.086E 01
160	9.00	15.00	2.555E 02	4.556E 01	1.956E 01	8.022E 00	9.901E 00
161	10.00	0.0	-3.810E-03	-6.683E-04	-2.885E-04	-1.117E-04	-1.647E-04
162	10.00	1.00	8.337E 01	1.462E 01	6.313E 00	2.443E 00	3.605E 00
163	10.00	2.00	1.203E 02	2.093E 01	9.038E 00	3.495E 00	5.157E 00
164	10.00	3.00	2.796E 02	1.008E 02	2.899E 01	2.159E 01	1.806E 01
165	10.00	4.00	1.032E 02	2.974E 01	9.571E 00	6.025E 00	5.785E 00
166	10.00	5.00	2.287E 02	6.006E 01	2.768E 01	1.955E 01	2.825E 01
167	10.00	6.00	1.121E 02	2.190E 01	1.064E 01	8.601E 00	8.036E 00
168	10.00	7.00	7.680E 01	1.534E 01	7.544E 00	6.265E 00	4.568E 00
169	10.00	8.00	1.411E 02	3.336E 01	1.225E 01	5.922E 01	2.416E 00
170	10.00	9.00	9.980E 01	2.684E 01	8.122E 00	2.345E 01	3.463E 00
171	10.00	10.00	9.477E 01	2.136E 01	7.748E 00	1.460E 01	4.092E 00
172	10.00	11.00	3.172E 02	5.841E 01	2.500E 01	1.662E 01	1.495E 01
173	10.00	12.00	3.311E 02	6.040E 01	2.604E 01	1.472E 01	1.421E 01
174	10.00	13.00	3.385E 02	6.151E 01	2.642E 01	1.352E 01	1.383E 01
175	10.00	14.00	3.405E 02	6.161E 01	2.642E 01	1.256E 01	1.362E 01
176	10.00	15.00	3.328E 02	6.004E 01	2.573E 01	1.212E 01	1.318E 01
177	11.00	0.0	1.867E 01	3.276E 00	1.414E 00	5.474E-01	8.075E-01
178	11.00	1.00	9.057E 01	4.143E 01	1.074E 01	9.262E 00	6.875E 00
179	11.00	2.00	2.769E 02	1.474E 02	3.599E 01	3.368E 01	2.344E 01
180	11.00	3.00	4.996E 02	2.022E 02	5.635E 01	4.910E 01	4.252E 01
181	11.00	4.00	5.989E 02	1.228E 02	5.184E 01	3.867E 01	5.431E 01
182	11.00	5.00	6.508E 02	1.185E 02	5.462E 01	4.007E 01	5.963E 01
183	11.00	6.00	1.611E 02	3.335E 01	1.541E 01	1.287E 01	1.338E 01
184	11.00	7.00	9.773E 01	2.124E 01	9.695E 00	7.807E 00	7.255E 00
185	11.00	8.00	8.129E 01	1.854E 01	2.272E 01	2.011E 01	5.244E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
186	11.00	9.00	1.865E 02	5.526E 01	1.394E 01	7.838E 01	4.401E 00
187	11.00	10.00	1.183E 02	3.204E 01	1.166E 01	3.742E 01	3.518E 00
188	11.00	11.00	9.338E 01	2.289E 01	9.147E 00	1.566E 01	3.556E 00
189	11.00	12.00	2.968E 02	5.716E 01	2.418E 01	2.015E 01	1.195E 01
190	11.00	13.00	3.289E 02	6.194E 01	2.637E 01	1.847E 01	1.227E 01
191	11.00	14.00	3.585E 02	6.651E 01	2.836E 01	1.745E 01	1.426E 01
192	11.00	15.00	3.703E 02	6.810E 01	2.908E 01	1.648E 01	1.469E 01
193	12.00	0.0	4.781E 00	8.387E-01	3.620E-01	1.401E-01	2.067E-01
194	12.00	1.00	9.073E 00	1.590E 00	6.869E-01	2.656E-01	3.921E-01
195	12.00	2.00	1.070E 02	5.864E 01	1.417E 01	1.345E 01	9.252E 00
196	12.00	3.00	8.530E 01	4.596E 01	1.117E 01	1.052E 01	7.283E 00
197	12.00	4.00	2.910E 02	6.555E 01	2.563E 01	1.862E 01	2.411E 01
198	12.00	5.00	2.079E 02	4.534E 01	1.822E 01	1.340E 01	1.794E 01
199	12.00	6.00	1.324E 02	2.977E 01	1.296E 01	1.131E 01	1.066E 01
200	12.00	7.00	9.528E 01	2.277E 01	9.817E 00	8.517E 00	7.485E 00
201	12.00	8.00	8.823E 01	2.282E 01	8.473E 00	7.215E 00	6.192E 00
202	12.00	9.00	2.910E 02	9.902E 01	2.442E 01	1.295E 02	5.476E 00
203	12.00	10.00	2.027E 02	6.171E 01	2.068E 01	4.592E 01	7.137E 00
204	12.00	11.00	2.202E 02	5.045E 01	2.024E 01	2.973E 01	8.695E 00
205	12.00	12.00	2.677E 02	5.526E 01	2.301E 01	2.481E 01	1.028E 01
206	12.00	13.00	3.050E 02	6.033E 01	2.540E 01	2.301E 01	1.168E 01
207	12.00	14.00	3.336E 02	6.437E 01	2.723E 01	2.160E 01	1.292E 01
208	12.00	15.00	3.583E 02	6.792E 01	2.884E 01	2.042E 01	1.399E 01
209	13.00	0.0	8.790E-01	1.542E-01	6.656E-02	2.576E-02	3.800E-02
210	13.00	1.00	1.850E 00	3.245E-01	1.401E-01	5.421E-02	7.999E-02
211	13.00	2.00	5.434E 01	1.352E 01	4.527E 00	2.161E 00	1.724E 00
212	13.00	3.00	7.744E 01	1.841E 01	6.305E 00	2.615E 00	2.265E 00
213	13.00	4.00	1.156E 02	2.584E 01	9.429E 00	4.751E 00	4.905E 00
214	13.00	5.00	8.368E 01	2.071E 01	7.324E 00	4.521E 00	4.540E 00
215	13.00	6.00	7.881E 01	2.006E 01	8.441E 00	7.466E 00	5.391E 00
216	13.00	7.00	7.203E 01	1.863E 01	7.841E 00	7.339E 00	5.307E 00
217	13.00	8.00	7.535E 01	1.824E 01	7.376E 00	6.352E 00	5.332E 00
218	13.00	9.00	9.838E 01	2.611E 01	1.199E 01	2.466E 01	5.304E 00
219	13.00	10.00	1.295E 02	3.585E 01	1.654E 01	3.953E 01	5.095E 00
220	13.00	11.00	1.794E 02	4.203E 01	1.915E 01	3.210E 01	7.229E 00
221	13.00	12.00	1.953E 02	4.268E 01	1.860E 01	2.606E 01	7.925E 00
222	13.00	13.00	2.781E 02	5.577E 01	2.377E 01	2.526E 01	9.826E 00

NAS MIRAMAR

MONTH = MAY PERIOD = 1200 TO 1300 HOURS ON A WEEKDAY

RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
223	13.00	14.00	2.935E 02	5.858E 01	2.505E 01	2.395E 01	1.082E 01
224	13.00	15.00	2.537E 02	5.114E 01	2.171E 01	2.114E 01	9.516E 00
225	14.00	0.0	1.167E-01	2.046E-02	8.834E-03	3.419E-03	5.044E-03
226	14.00	1.00	3.303E-01	8.281E-02	2.879E-02	1.612E-02	1.717E-02
227	14.00	2.00	7.762E-01	2.573E-01	7.721E-02	5.410E-02	4.764E-02
228	14.00	3.00	2.691E 01	5.104E 00	1.980E 00	6.129E-01	5.559E-01
229	14.00	4.00	1.029E 02	1.933E 01	7.583E 00	2.084E 00	2.116E 00
230	14.00	5.00	8.798E 01	1.794E 01	6.757E 00	2.336E 00	2.335E 00
231	14.00	6.00	6.970E 01	1.591E 01	6.607E 00	4.384E 00	2.683E 00
232	14.00	7.00	5.030E 01	1.336E 01	6.016E 00	5.951E 00	3.013E 00
233	14.00	8.00	5.415E 01	1.432E 01	5.843E 00	5.244E 00	3.656E 00
234	14.00	9.00	5.962E 01	1.525E 01	6.356E 00	5.700E 00	4.142E 00
235	14.00	10.00	6.724E 01	1.731E 01	8.801E 00	1.181E 01	4.376E 00
236	14.00	11.00	1.062E 02	2.520E 01	1.129E 01	1.492E 01	5.562E 00
237	14.00	12.00	1.318E 02	3.032E 01	1.357E 01	1.824E 01	6.113E 00
238	14.00	13.00	2.364E 02	4.908E 01	2.128E 01	2.170E 01	8.203E 00
239	14.00	14.00	2.569E 02	5.263E 01	2.264E 01	2.246E 01	8.885E 00
240	14.00	15.00	2.135E 02	4.459E 01	1.912E 01	2.074E 01	7.335E 00
241	15.00	0.0	1.125E-02	1.974E-03	8.520E-04	3.295E-04	4.865E-04
242	15.00	1.00	2.965E-02	5.340E-03	2.267E-03	9.050E-04	1.298E-03
243	15.00	2.00	6.384E-02	1.366E-02	5.205E-03	2.507E-03	3.047E-03
244	15.00	3.00	3.019E 00	5.595E-01	2.203E-01	6.560E-02	6.216E-02
245	15.00	4.00	1.308E 02	2.294E 01	9.373E 00	2.065E 00	2.310E 00
246	15.00	5.00	1.335E 02	2.400E 01	9.667E 00	2.304E 00	2.505E 00
247	15.00	6.00	5.956E 01	1.205E 01	4.574E 00	1.563E 00	1.530E 00
248	15.00	7.00	4.046E 01	9.781E 00	6.084E 00	1.051E 00	1.631E 00
249	15.00	8.00	4.072E 01	1.054E 01	6.483E 00	7.943E 00	2.164E 00
250	15.00	9.00	4.605E 01	1.185E 01	6.585E 00	7.659E 00	2.765E 00
251	15.00	10.00	6.589E 01	1.552E 01	8.084E 00	8.545E 00	3.614E 00
252	15.00	11.00	1.406E 02	2.889E 01	1.335E 01	1.035E 01	5.253E 00
253	15.00	12.00	1.711E 02	3.490E 01	1.543E 01	1.195E 01	6.048E 00
254	15.00	13.00	1.967E 02	4.017E 01	1.767E 01	1.511E 01	6.668E 00
255	15.00	14.00	2.199E 02	4.479E 01	1.955E 01	1.748E 01	7.258E 00
256	15.00	15.00	2.069E 02	4.271E 01	1.855E 01	1.809E 01	6.606E 00
257	16.00	0.0	7.866E-04	1.380E-04	5.957E-05	2.306E-05	3.401E-05
258	16.00	1.00	2.284E-03	4.007E-04	1.730E-04	6.696E-05	9.878E-05
259	16.00	2.00	2.367E-02	4.058E-03	1.707E-03	5.002E-04	6.158E-04

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RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
260	16.00	3.00	1.227E-01	2.545E-02	9.57CE-C3	3.871E-C3	3.588E-03
261	16.00	4.00	1.208E 02	2.093E 01	8.611E 00	1.850E 00	2.094E 00
262	16.00	5.00	1.458E 02	2.544E 01	1.042E 01	2.264E 00	2.566E 00
263	16.00	6.00	5.052E 01	9.375E 00	3.705E 00	9.520E-01	1.038E 00
264	16.00	7.00	3.314E 01	6.597E 00	3.021E 00	1.834E 00	5.445E-01
265	16.00	8.00	3.161E 01	7.462E 00	4.493E 00	5.253E 00	1.232E 00
266	16.00	9.00	3.527E 01	8.675E 00	4.759E 00	5.342E 00	1.688E 00
267	16.00	10.00	4.222E 01	1.036E 01	5.758E 00	6.692E 00	2.245E 00
268	16.00	11.00	4.873E 01	1.184E 01	6.415E 00	7.380E 00	2.731E 00
269	16.00	12.00	1.190E 02	2.447E 01	1.132E 01	8.505E 00	4.300E 00
270	16.00	13.00	1.561E 02	3.135E 01	1.419E 01	1.054E 01	5.164E 00
271	16.00	14.00	1.745E 02	3.515E 01	1.568E 01	1.244E 01	5.555E 00
272	16.00	15.00	1.333E 02	2.841E 01	1.286E 01	1.325E 01	4.822E 00
273	17.00	0.0	3.988E-05	6.995E-06	3.020E-06	1.169E-06	1.724E-06
274	17.00	1.00	1.186E-04	2.080E-05	8.978E-06	3.475E-06	5.126E-06
275	17.00	2.00	1.778E 01	3.080E 00	1.268E 00	2.670E-01	3.053E-01
276	17.00	3.00	3.593E 01	6.225E 00	2.563E 00	5.395E-01	6.173E-01
277	17.00	4.00	5.913E 01	1.025E 01	4.218E 00	8.907E-01	1.018E 00
278	17.00	5.00	6.897E 01	1.189E 01	4.900E 00	1.106E 00	1.220E 00
279	17.00	6.00	3.954E 01	6.967E 00	2.833E 00	7.046E-01	7.480E-01
280	17.00	7.00	2.573E 01	4.935E 00	1.920E 00	5.832E-01	5.861E-01
281	17.00	8.00	2.455E 01	5.178E 00	2.107E 00	1.136E 00	7.223E-01
282	17.00	9.00	2.703E 01	6.108E 00	2.608E 00	1.839E 00	1.001E 00
283	17.00	10.00	3.124E 01	7.336E 00	3.465E 00	3.137E 00	1.375E 00
284	17.00	11.00	3.644E 01	8.680E 00	4.606E 00	5.066E 00	1.785E 00
285	17.00	12.00	7.445E 01	1.570E 01	7.515E 00	6.072E 00	2.778E 00
286	17.00	13.00	9.419E 01	1.951E 01	9.116E 00	7.058E 00	3.392E 00
287	17.00	14.00	1.408E 02	2.780E 01	1.266E 01	9.003E 00	4.340E 00
288	17.00	15.00	1.060E 02	2.220E 01	1.034E 01	9.691E 00	3.849E 00
289	18.00	0.0	1.467E-06	2.573E-07	1.111E-07	4.300E-08	6.343E-08
290	18.00	1.00	1.095E-05	1.920E-06	8.290E-07	3.209E-07	4.733E-07
291	18.00	2.00	-3.110E-05	-4.833E-06	-1.252E-06	2.652E-06	5.125E-06
292	18.00	3.00	1.533E 01	2.602E 00	1.080E 00	2.544E-01	2.731E-01
293	18.00	4.00	1.723E 01	2.986E 00	1.229E 00	2.593E-01	2.964E-01
294	18.00	5.00	3.779E 01	6.369E 00	2.650E 00	6.592E-01	6.883E-01
295	18.00	6.00	3.578E 01	6.074E 00	2.516E 00	6.416E-01	6.646E-01
296	18.00	7.00	1.884E 01	3.399E 00	1.364E 00	3.666E-01	3.809E-01

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RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
297	18.00	8.00	1.838E 01	3.566E 00	1.390E 00	4.597E-01	4.401E-01
298	18.00	9.00	2.183E 01	4.486E 00	1.779E 00	8.329E-01	6.397E-01
299	18.00	10.00	2.589E 01	5.567E 00	2.336E 00	1.486E 00	9.043E-01
300	18.00	11.00	3.648E 01	7.815E 00	3.459E 00	2.490E 00	1.314E 00
301	18.00	12.00	5.540E 01	1.140E 01	5.369E 00	4.102E 00	1.872E 00
302	18.00	13.00	5.643E 01	1.202E 01	5.711E 00	4.686E 00	2.154E 00
303	18.00	14.00	1.135E 02	2.184E 01	9.944E 00	6.364E 00	3.286E 00
304	19.00	15.00	1.020E 02	2.021E 01	9.400E 00	7.246E 00	3.262E 00
305	19.00	0.0	0.0	0.0	0.0	0.0	0.0
306	19.00	1.00	5.234E-02	9.067E-03	3.733E-03	7.860E-04	8.587E-04
307	19.00	2.00	4.311E-01	7.469E-02	3.075E-02	6.474E-03	7.402E-03
308	19.00	3.00	9.521E 00	1.584E 00	6.625E-01	1.734E-01	1.760E-01
309	19.00	4.00	2.036E 01	3.388E 00	1.417E 00	3.697E-01	3.758E-01
310	19.00	5.00	2.593E 01	4.314E 00	1.804E 00	4.737E-01	4.803E-01
311	19.00	6.00	2.537E 01	4.251E 00	1.782E 00	4.395E-01	4.611E-01
312	19.00	7.00	1.407E 01	2.449E 00	1.002E 00	2.536E-01	2.668E-01
313	19.00	8.00	1.535E 01	2.776E 00	1.115E 00	3.126E-01	3.178E-01
314	19.00	9.00	1.569E 01	3.025E 00	1.186E 00	3.556E-01	3.797E-01
315	19.00	10.00	2.287E 01	4.501E 00	1.795E 00	7.994E-01	6.653E-01
316	19.00	11.00	2.696E 01	5.512E 00	2.273E 00	1.266E 00	8.713E-01
317	19.00	12.00	3.097E 01	6.529E 00	2.815E 00	1.506E 00	1.105E 00
318	19.00	13.00	7.193E 01	1.363E 01	6.106E 00	3.536E 00	1.937E 00
319	19.00	14.00	8.384E 01	1.590E 01	7.216E 00	4.397E 00	2.317E 00
320	19.00	15.00	6.917E 01	1.384E 01	6.447E 00	4.851E 00	2.280E 00
321	20.00	0.0	0.0	0.0	0.0	0.0	0.0
322	20.00	1.00	5.273E-03	9.135E-04	3.761E-04	7.918E-05	9.054E-05
323	20.00	2.00	2.773E-02	4.803E-03	1.978E-03	4.164E-04	4.762E-04
324	20.00	3.00	9.027E-02	1.564E-02	6.440E-03	1.356E-03	1.552E-03
325	20.00	4.00	8.037E 00	1.330E 00	5.577E-01	1.493E-01	1.498E-01
326	20.00	5.00	1.297E 01	2.150E 00	9.008E-01	2.402E-01	2.415E-01
327	20.00	6.00	5.546E 01	9.459E 00	3.926E 00	8.736E-01	9.635E-01
328	20.00	7.00	1.726E 01	2.963E 00	1.223E 00	2.841E-01	3.080E-01
329	20.00	8.00	2.511E 01	4.275E 00	1.768E 00	4.585E-01	4.724E-01
330	20.00	9.00	1.500E 01	2.693E 00	1.086E 00	3.054E-01	3.056E-01
331	20.00	10.00	2.245E 01	4.112E 00	1.648E 00	6.010E-01	5.814E-01
332	20.00	11.00	2.424E 01	4.619E 00	1.853E 00	7.863E-01	6.502E-01
333	20.00	12.00	2.627E 01	5.206E 00	2.143E 00	1.160E 00	8.301E-01

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RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
334	20.00	13.00	4.255E 01	8.153E 00	3.626E 00	2.158E 00	1.169E 00
335	20.00	14.00	5.374E 01	1.027E 01	4.629E 00	2.835E 00	1.495E 00
336	20.00	15.00	4.353E 01	8.902E 00	4.159E 00	3.224E 00	1.503E 00
337	21.00	0.0	0.0	0.0	0.0	0.0	0.0
338	21.00	1.00	-1.613E-08	-2.795E-09	-1.151E-09	-2.423E-10	-2.770E-10
339	21.00	2.00	3.184E-01	5.265E-02	2.208E-02	5.954E-03	5.942E-03
340	21.00	3.00	9.155E-01	1.514E-01	6.348E-02	1.707E-02	1.708E-02
341	21.00	4.00	1.990E 00	3.292E-01	1.380E-01	3.710E-02	3.714E-02
342	21.00	5.00	7.805E 01	1.339E 01	5.535E 00	1.212E 00	1.347E 00
343	21.00	6.00	9.425E 01	1.619E 01	6.689E 00	1.456E 00	1.623E 00
344	21.00	7.00	4.093E 01	6.896E 00	2.870E 00	7.042E-01	7.382E-01
345	21.00	8.00	4.141E 01	6.956E 00	2.896E 00	7.902E-01	8.085E-01
346	21.00	9.00	2.269E 01	3.902E 00	1.606E 00	4.978E-01	5.065E-01
347	21.00	10.00	2.205E 01	3.879E 00	1.578E 00	5.295E-01	5.322E-01
348	21.00	11.00	2.416E 01	4.352E 00	1.758E 00	6.345E-01	6.184E-01
349	21.00	12.00	2.708E 01	5.002E 00	2.032E 00	8.487E-01	7.353E-01
350	21.00	13.00	2.477E 01	4.750E 00	1.972E 00	9.432E-01	6.988E-01
351	21.00	14.00	3.016E 01	5.910E 00	2.670E 00	1.766E 00	8.857E-01
352	21.00	15.00	2.873E 01	5.925E 00	2.762E 00	2.172E 00	9.940E-01
353	22.00	0.0	-3.089E-11	-5.351E-12	-2.203E-12	-4.638E-13	-5.303E-13
354	22.00	1.00	3.727E-06	6.456E-07	2.658E-07	5.596E-08	6.398E-08
355	22.00	2.00	1.761E-05	3.072E-06	1.262E-06	2.569E-07	2.931E-07
356	22.00	3.00	1.086E-01	1.756E-02	7.533E-03	2.028E-03	2.028E-03
357	22.00	4.00	2.825E-01	4.672E-02	1.959E-02	5.271E-03	5.275E-03
358	22.00	5.00	2.605E 01	4.476E 00	1.845E 00	4.016E-01	4.482E-01
359	22.00	6.00	2.092E 01	3.592E 00	1.484E 00	3.235E-01	3.605E-01
360	22.00	7.00	2.020E 01	3.423E 00	1.422E 00	3.368E-01	3.554E-01
361	22.00	8.00	1.540E 01	2.612E 00	1.084E 00	2.611E-01	2.765E-01
362	22.00	9.00	1.766E 01	3.023E 00	1.247E 00	3.682E-01	3.819E-01
363	22.00	10.00	1.850E 01	3.200E 00	1.314E 00	4.174E-01	4.247E-01
364	22.00	11.00	2.030E 01	3.571E 00	1.454E 00	4.920E-01	4.946E-01
365	22.00	12.00	1.805E 01	3.283E 00	1.327E 00	4.726E-01	4.481E-01
366	22.00	13.00	1.747E 01	3.312E 00	1.343E 00	5.681E-01	4.641E-01
367	22.00	14.00	1.863E 01	3.667E 00	1.505E 00	7.752E-01	5.501E-01
368	22.00	15.00	2.093E 01	4.248E 00	1.987E 00	1.550E 00	6.797E-01
369	23.00	0.0	0.0	0.0	0.0	0.0	0.0
370	23.00	1.00	0.0	0.0	0.0	0.0	0.0

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RECEPTOR CONCENTRATION DATA FROM TOTAL SOURCES

RECEPTOR NUMBER	RECEPTOR LOCATION (KILOMETERS) X	Y	EXPECTED ARITHMETIC MEAN (MICROGRAMS/CU. METER) CO	HC	NOX	PT	SO2
371	23.00	2.00	-1.454E-07	-2.404E-08	-1.008E-08	-2.715E-05	-2.715E-05
372	23.00	3.00	7.243E-03	1.197E-03	5.022E-04	1.352E-04	1.352E-04
373	23.00	4.00	2.289E-02	3.786E-03	1.587E-03	4.270E-04	4.276E-04
374	23.00	5.00	2.504E 00	4.301E-01	1.777E-01	3.864E-02	4.310E-02
375	23.00	6.00	3.570E 00	6.129E-01	2.533E-01	5.537E-02	6.160E-02
376	23.00	7.00	5.527E 00	9.442E-01	3.905E-01	8.830E-02	9.661E-02
377	23.00	8.00	6.482E 00	1.107E 00	4.582E-01	1.053E-01	1.144E-01
378	23.00	9.00	1.027E 01	1.755E 00	7.246E-01	2.052E-01	2.153E-01
379	23.00	10.00	1.250E 01	2.150E 00	8.861E-01	2.677E-01	2.737E-01
380	23.00	11.00	1.480E 01	2.572E 00	1.054E 00	3.254E-01	3.408E-01
381	23.00	12.00	1.311E 01	2.339E 00	9.491E-01	2.955E-01	2.965E-01
382	23.00	13.00	1.352E 01	2.488E 00	1.005E 00	3.722E-01	3.259E-01
383	23.00	14.00	1.459E 01	2.775E 00	1.132E 00	5.027E-01	3.876E-01
384	23.00	15.00	1.628E 01	3.193E 00	1.320E 00	6.587E-01	4.792E-01
385	24.00	0.0	0.0	0.0	0.0	0.0	0.0
386	24.00	1.00	-3.898E-10	-6.444E-11	-2.702E-11	-7.276E-12	-7.276E-12
387	24.00	2.00	6.336E-05	1.048E-05	4.393E-06	1.183E-06	1.183E-06
388	24.00	3.00	2.722E-04	4.501E-05	1.888E-05	5.084E-06	5.088E-06
389	24.00	4.00	1.212E-02	2.078E-03	8.592E-04	1.854E-04	2.098E-04
390	24.00	5.00	6.229E-02	1.066E-02	4.412E-03	9.800E-04	1.082E-03
391	24.00	6.00	4.284E-01	7.343E-02	3.036E-02	6.702E-03	7.423E-03
392	24.00	7.00	1.470E 00	2.516E-01	1.039E-01	2.653E-02	2.858E-02
393	24.00	8.00	2.941E 00	5.031E-01	2.079E-01	5.470E-02	5.845E-02
394	24.00	9.00	4.794E 00	8.207E-01	3.388E-01	9.123E-02	9.688E-02
395	24.00	10.00	6.858E 00	1.178E 00	4.853E-01	1.353E-01	1.426E-01
396	24.00	11.00	8.957E 00	1.543E 00	6.377E-01	1.801E-01	1.937E-01
397	24.00	12.00	8.988E 00	1.582E 00	6.464E-01	1.858E-01	1.889E-01
398	24.00	13.00	1.006E 01	1.810E 00	7.368E-01	2.411E-01	2.237E-01
399	24.00	14.00	1.132E 01	2.051E 00	8.529E-01	3.360E-01	2.737E-01
400	24.00	15.00	1.275E 01	2.424E 00	9.979E-01	4.775E-01	3.395E-01

LIST OF REFERENCES

1. Federal Register, Vol. 36, No. 84, 30 April, 1971.

2. Federal Register, Vol. 38, No. 136, 17 July, 1973.

3. Northern Research and Engineering Corporation Report 1167 (Volumes 1 and 2), The Potential Impact of Aircraft Emissions On Air Quality, by M. Platt, R. C. Baker, E. K. Bastress, K. M. Chug and R. D. Siegel, 1971.

4. GEOMET Report EF-262, Model Verification-Aircraft Emissions Impact On Air Quality, by S. D. Thayer, D. J. Pelton, G. H. Stadsklev and B. D. Weaver, 1974.

5. TRW Systems Group Report NTIS No. PB 189194, Air Quality Display Model, November 1969.

6. Air Force Weapons Laboratory Technical Report-74-304, A Generalized Air Quality Assessment Model for Air Force Operations, by D. M. Rote and L. E. Wangen, March 1975.

7. Naval Environmental Protection Support Office Report 101-Revision 3, Aircraft Engine Emissions Catalog, by B. A. Longley-Cook and J. A. Krimmel, June 1974.

8. Air Force Weapons Laboratory Technical Report-73-199, United States Air Force Aircraft Pollution Emissions, by D. F. Naugle, Capt., USAF, November 1973.

9. Air Force Weapons Laboratory Technical Report-74-303, USAF Aircraft Pollution Emission Factors and Landing and Takeoff (LTO) Cycles, by D. F. Naugle, Capt., USAF and S. R. Nelson, February 1975.

10. Naval Postgraduate School Report NPS-57Nt75071A, Modification of an Ambient Air Quality Model for Assessment of U.S. Naval Aviation Emittants, by K. I. Weal, Lcdr., USN and D. W. Netzer, August 1975.

11. Air Force Weapons Laboratory Technical Report-74-54, A Generalized Air Quality Assessment Model-An Operators Guide, by Argonne National Laboratory, July 1974 (Rev. May 1975).

12. Air Force Weapons Laboratory Technical Report-74-279, USAF Aircraft Takeoff Length Distances and Climbout Profiles, by D. F. Menicucci, October 1974.

13. Aircraft Environmental Support Office Report AESO 111-75-15, Air Quality Impact From Aircraft Engine Test Facilities At Naval Air Station Miramar, California, June 1975.

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